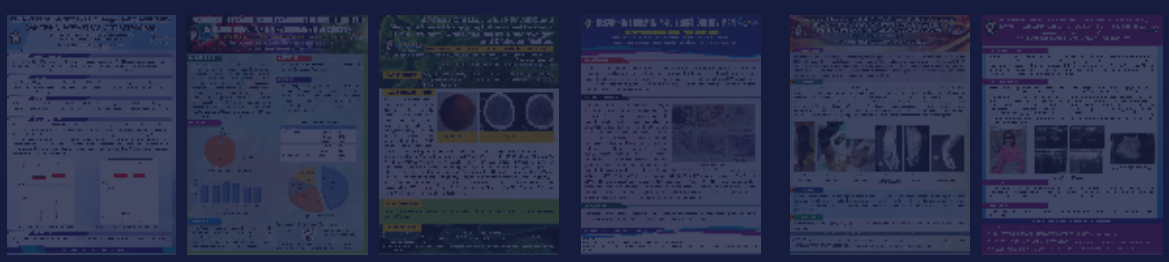
Kumpulan Poster Ilmiah

Semarang Gastroentero-Hepatology Update 2020

Gastrointestinal and Liver Disease : From Precision Medicine to Clinical Practice

Semarang, 21 - 23 Agustus 2020



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dr. Khoirun Mukhsinin Putra

Atypical Chronic Myeloid Leukemia and Severe Iron Deficiency Anemia In Hepatitis B Related Decompensated Liver Cirhosis: A Case Report

ATYPICAL CHRONIC MYELOID LEUKEMIA AND SEVERE IRON DEFICIENCY ANEMIA IN HEPATITIS B RELATED DECOMPENSATED LIVER CIRHOSIS: A CASE REPORT

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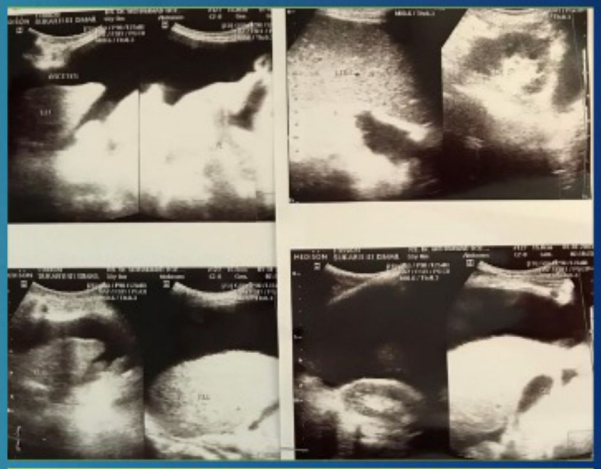
ABSTRACT

Atypical Chronic Myeloid Leukaemia or aCML is a chronic myeloproliferative disorder with a clinical and haematological picture similar to chronic myelogenous leukaemia (CML) but lacking Philadelphia chromosome and BCR-ABL. ACML is a rare disorder of old adults. No predominance of sex and the incidence is not established. Cirrhosis is defined as the histological development of regenerative nodules surrounded by fibrous bands in response to chronic liver injury. Various insults can injure the liver, including viral infections (hepatitis), toxins, hereditary conditions, or autoimmune processes. Iron deficiency anemia or IDA is associated with pathological gastrointestinal conditions and also with liver disorders.

CASE

A 54-year-old woman has reported a history of hematemesis, melena, refractory ascites, no history of blood cancer, unresponsive to high-dose diuretics and restricted sodium diet. In laboratory findings, Hb : 5,4 g/dl, MCV : 52,5 fl, MCH : 17 pg, SI : 21 µL/dL,TIBC : 328 µL/dL, Ferritin : 13.40 ng/ml, WBC : 89680 /µL, platelet : 1.356.000/µL, HbsAg : Reactive, HBeAg : Reactive, AntiHBV : 72.500, BMP : CML (Chronic Phase), BCR-ABL : Transcription Not Detected BCR ABL. Based on the USG, we found splenomegaly, liver cirrhosis and ascites. During hospital treatment, she takes blood transfusion until Hb > 9gr/dl before takes hydroxyurea. After treatment, platelet and leukocyte are reduced to a normal level. the effects of hydroxyurea in patients are monitored every 3-4 days.



Pic.1. USG (imaging study this patient)

DISCUSSION

Anemia is a frequent manifestation in patients with liver cirrhosis. It is characteristical of moderate severity and may be caused by diverse mechanisms. Iron deficiency appears to be a major mechanism for anemia developed in these patients. The most important approach to management can be divided into two parts, there are identify the underlying disease and treat the cause of anemia. The prognosis of patients diagnosed with aCML is very poor. Overall survival ranges between 10.8 months and 25 months even 29 months for smaller series. No guidelines exist on the treatment of aCML patients. When a patient has suspected CML without confirmation, we initiate hydroxyurea to reduce WBC and platelet counts close to normal levels. We continue hydroxyurea until confirmation of the Philadelphia chromosome. Hydroxyurea is a contraindication in severe anemia.

Keywords : severe anemia, liver cirrhosis, aCML

References :

Rosario GC, Jones EA, Otero RM, et al. Spectrum of anemia associated with chronic liver disease. World J Gastroenterol. 2009 Oct 7; 15(37): 4653–4658.
Afdhal NH, Schuppan D et al. Liver Cirrhosis, Lancet. 2008. 371(9615):838-851
Kantarjian H, Cortes J, et al. How I treat newly diagnosed chronic phase CML. Blood (2012) 120 (7): 1390–1397.
Sokolowska JED, Gajda AW, Madry K, Trojaczek JD. Atypical Chronic myeloid leukemia, a rare subtype of myelodysplastic/myeloproliferative neoplasm. Contemp Oncol (Pozn). 2018; 22(1): 14–19.

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2.

dr. Kresna Aditya Raharja

Importance of Skeletal Mass Evaluation on Hepatocellular Carcinoma Patients Treated with Sorafenib: A Literature Review

Importance of Skeletal Mass Evaluation on Hepatocellular Carcinoma Patients Treated with Sorafenib: A Literature Review

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Background

Sorafenib was known as first-line systemic therapy for Hepatocellular Carcinoma (HCC). However, recent study has also found that Sorafenib cause decrement of skeletal muscle index (SMI), which leading to sarcopenia. Hence, sarcopenia was found to be correlated with worse outcome on HCC patients. This study aimed to the importance of skeletal muscle mass evaluation on HCC patients treated with Sorafenib.

Methods

A literature search was conducted in the electronic databases (PubMed and ScienceDirect), identifying observational studies from 2015 to 2020 with Skeletal Muscle, Sarcopenia, Sorafenib, and HCC as keywords

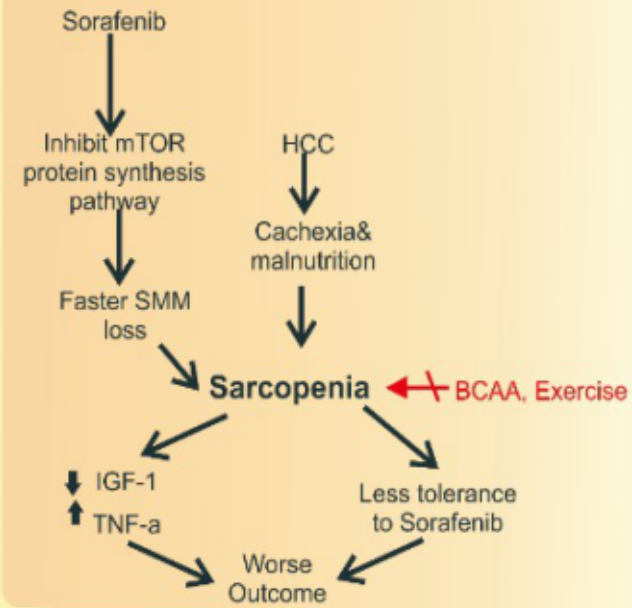
Result

- Sarcopenia/LSMM defined as SMI lower than
  36,2-43cm^2/m^2 for men
  29,6-41cm^2/m^2 for women
- HCC with and without sarcopenia patients treated with sorafenib showed a decrease of SMI by 1,07 and 2,14 within 120 days
- LSMM before sorafenib correlated with lower OS 100,5 days-39 weeks versus 11,7 months-61 weeks and lower MST, 7,6-13,7 months versus13,4-18,5 months
- Lower SMI on third month of Sorafenib treatment showed lower MST 10,9-11 versus 13,4 months
- Decrement > 5,73 cm2/m^2/120 days provide worse survival
- Low SMI patients' 1st and 2nd year survival rate were lower 39,7% Vs. 57,6% and 11,3% versus 36%

Author (year)	Type	Number of Population (M/F)	Definition of LSMM (SMI)	Time of evaluation	Result
G. Antoncili et.al. (2018)[2]	Rertrospective Cohort	96 (75/21)	M<43,F<41	Within 30 days of treatment	OS was lower in LSMM (39 vs 61 weeks)
A. Naganuma et.al (2017)[6]	Rertrospective Cohort	69 (51/18)	M<43,F<36	Before treatment	MST significantly lower in LSMM men (7,6 vs 13,5 months), 1st & 2nd year SR 39,7% vs 57,6% and 11,3%vs 36%
K. Sawada et.al(2019)[7]	Rertrospective Cohort	82 (67/15)	M<36,3,F<29,6	Before treatment	OS was lower in LSMM (100,5 vs 431 days)
T. A. Labeur et.al (2018)[8]	Rertrospective Cohort	278(220/58)	M<43,F<41	4 weeks before treatment	OS was lower in LSMM (5,8 vs 11,7 months)
I. Saeki et.al (2018)[9]	Cohort	100 (72/28)	M<42,F<38	1 month before, 3&6 months after treatment	MST lower in patients with muscle mass depletion (10,9 vs 13,4 months)
H. Nishikawa et.al (2017)[10]	Rertrospective Cohort	232 (181/51)	M<36,2,F<29,6	Before treatment	OS was lower in LSMM (174 vs 454 days)
H. Takada et.al(2018)[11]	Rertrospective Cohort	214 (166/48)	M<42,F<38	Before treatment	MST was lower in LSMM (13,7 vs 18,5 months)
K. Imai et.al(2019)[12]	Cohort	61(54/7)	M<42,F<38	1 month before & every 3 months after treatment	Rapid depletion during treatment (SMI decrement > 5,31) had poorer outcome
K. Imai et.al (2020)[13]	Rertrospective Cohort	61 (53/8)	M<43,F<38	Before, during, after treatment	LSMM correlates to worse outcome
I. Saeki et.al (2019)[14]	Rertrospective Cohort	133 (99/44)	M<43,F<38	1 month before & every 3 months after treatment	Muscle depletion correlates to worse MST (11 vs 13,4 months)

*F= female M= male, MST= median survival time; OS= overall survuval; vs= versus

Discussion



Conclusion

- Low SMM before and losing SMM during Sorafenib treatment correlated to worse outcome on HCC patients.
- Evaluating SMI before and after treatment of Sorafenib on HCC patients might play important role to determine patients' survival.
- Further studies are needed to confirm duration of evaluation and cut off point that might be exclusion for Sorafenib treatment

References

1. Galle PR, Forner A, Llovet JM, Mazzaferro V, Piscaglia F, Raoul J, et al. Clinical Practice Guidelines Of HEPATOLOGY EASL Clinical Practice Guidelines : Management of hepatocellular carcinoma. J Hepatol [Internet]. 2018;69(1):182–236.
2. Marrero JA, Kulik LM, Sirlin CB, Zhu AX, Finn RS, Abecassis MM, et al. Diagnosis , Staging , and Management of Hepatocellular Carcinoma : 2018 Practice Guidance by the American Association for the Study of Liver Diseases. 2018;68(2):723–50.
3. Chang K, Chen J, Wu W. Association between Loss of Skeletal Muscle Mass and Mortality and Tumor Recurrence in Hepatocellular Carcinoma : A Systematic Review and Meta-Analysis. Liver Cancer. 2018;7(87):90–103.
4. Antoun S, Birdsell L, Sawyer MB, Venner P, Escudier B, Baracos VE. Association of Skeletal Muscle Wasting With Treatment With Sorafenib in Patients With Advanced Renal Cell Carcinoma : Results From a Placebo-Controlled Study. J Clin Oncol. 2010;28(6):1054–60.
5. Antonelli G, Gigante E, Iavarone M, Megni P, Sangiovanni A, Iannicelli E, et al. Sarcopenia is Associated with Reduced Survival in Patients with Advanced Hepatocellular Carcinoma Undergoing Sorafenib Treatment. United Eur Gastroenterol J. 2018;6(7):1039–46.
6. Naganuma A, Hoshino T, Suzuki Y, Uehara D, Kudo T, Ishihara H, et al. Association between Skeletal Muscle Depletion and Sorafenib Treatment in Male Patients with Hepatocellular Carcinoma: A Retrospective Cohort Study. Acta Med Okayama. 2017;71(4):291–9.
7. Sawada K, Saitho Y, Hayashi H, Hasebe T, Nakajima S, Ikeda K, et al. Skeletal Muscle Mass is Associated with Toxicity , Treatment Tolerability ,and Additional or Subsequent Therapies in Patients with Hepatocellular Carcinoma receiving sorafenib treatment. J Gastroenterol Hepatol. 2019;3:329–37.
8. Labeur TA, van Vugt JLA, Came DWG, Takkenberg RB, Ijzermans JNM, Koerkamp BG, et al. Body Composition is an Independent Predictor of Outcome in Patients with Hepatocellular Carcinoma Treated with Sorafenib. Liver Cancer. 2019;8:255–73.
9. Saeki I, Yamasaki T, Maeda M, Kawano R, Hisanaga T, Iwamoto T, et al. No Muscle Depletion with High Visceral Fat as a Novel Beneficial Biomarker of Sorafenib for Hepatocellular Carcinoma. Liver Cancer. 2018;8505:359–71.
10. Nishikawa H, Nishijima N, Enomoto H, Sakamoto A, Kimura T, Iijima H, et al. Prognostic significance of sarcopenia in Patients with hepatocellular carcinoma undergoing sorafenib therapy. Oncol Lett. 2017;14:1637–47.
11. Takada H, Kurosaki M, Nakanishi H, Takahashi Y, Iwaki J, Tsuchiya K, et al. Impact of Pre-sarcopenia in Sorafenib Treatment for Advanced Hepatocellular Carcinoma. PLoS One. 2018;13:1–12.
12. Imai K, Takai K, Miwa T, Taguchi D, Hanai T, Suetsugu A. Rapid Depletions of Subcutaneous Fat Mass and Skeletal Muscle Mass Predict Worse Survival in Patients with Hepatocellular Carcinoma Treated with Sorafenib. Cancers (Basel). 2019;11:1238–17.
13. mai K, takai K, Miwa T, Taguchi D, Hana T, Suets gu A. Rapid Depletion of Subcutaneous Adipose Tissue during Sorafenib Treatment Predicts Poor Survival in Patients with Hepatocellular Carcinoma. Cancers (Basel). 2020;12:1795–805.
14. Saeki I, Yamasaki T, Maeda M, Hisanaga T, Takami T, Sakaida I. Effect of Body Composition on Survival Benefit of Hepatic Arterial Infusion Chemotherapy for Advanced Hepatocellular Carcinoma : A Comparison with Sorafenib Therapy. PLoS One. 2015;7:1–15.

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3.

dr. Stephanie Widodo Subagio

Rapunzel Syndrome

Rapunzel Syndrome

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BACKGROUND

Trichobezoar is a collection of dense mass of hair in stomach. The word trichobezoar is a combination of "trich" meaning hair from Greek and "bezoar" meaning poison in Arabic or Persian[1]. Rapunzel Syndome is a type of trichobezoar with an extension of the hair from stomach into the small bowel. Clinical manifestation is deceptive and ranges form classic gastrointestinal symptoms like nausea and vomitus, abdominal mass, to partial or complete gastric outlet obstruction. Commonly, a gastric trichobezoar has a tail extending to the jejunum, ileum, or the ileocecal junction[2].

CASE DESCRIPTION

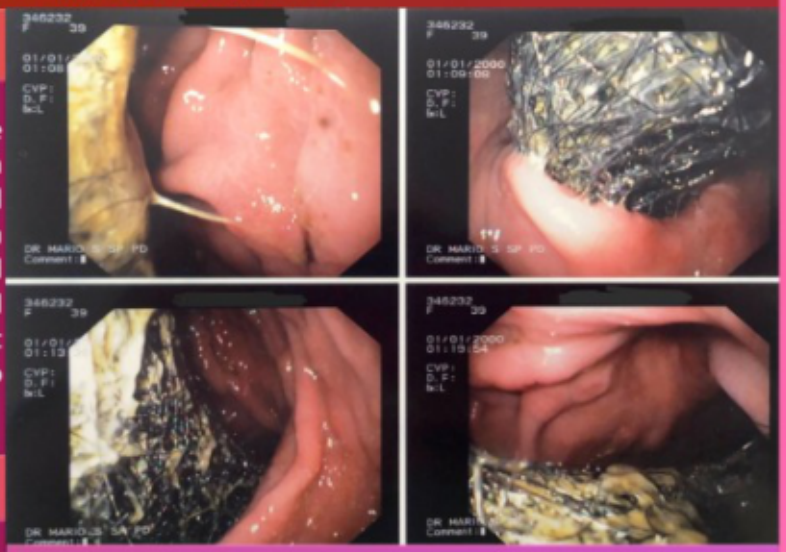
A 33 year-old female was admitted to Emergency Deparment with complaints of severe abdominal pain and persistent vomiting since 4 days ago. Patient looked malnourished, with BMI only 16.4 kg/m^2. Physical examination revealed epigastric tenderness and a hard and fixated mass . No pathologic findings in laboratory tests, except for iron deficiency anemia. Ultrasonography of abdomen showed echogenic, intraluminal, curvilinear in the stomach suggestive of gastric bezoar (Picture 1).

Picture 1. Ultrasonography of abdomen showed echogenic, intraluminal, curvilinear in the stomach suggestive of gastric bezoar.

Upper gastrointestinal endoscopy confirmed trichobezoar occupying almost the whole gastric cavity caused pylorus obstruction (Picture 2). Endoscopic removal of the mass was not possiblem hence surgical intervention was planned. Trichobezoar was removed by anterior gastrotomy (Picture 3). A 30 cms long bezoar weighing 700 grams was removed (Picture 4). The mass was occupying almost the whole stomach and extending up to the duodenum.

KEYWORDS

Rapunzel Syndrome, trichotillomania, trichophagia, gastric obstruction.



Picture 2. Upper gastrointestinal endoscopy confirmed trichobezoar.

Picture 3. Trichobezoar was removed by anterior gastrotomy.

Picture 4. A 30 cms long bezoar weighing 700 grams was removed from patient's stomach.

CONCLUSION

Rapunzel syndrome is a rare form of trichobezoar. Mostly, it occurs in psychiatric patients with trichotillomania and trichophagia[3]. There are co-existing factors like mental retardation, family problem/ parental discontent, and bereavement[4]. Small trichobezoar can be evacuated by endoscopic removal, but large trichobezoar should be removed by surgery. Psychiatric treatments also needed to prevent its recurrence[5].

REFERENCES

1. Rabie ME, Arishi AR, Khan A, Ageely H, El-Nasr SGA, Fagihi M. Rapunzel syndrome: The unsuspected culprit. World Gastroenterol. 2008; 14(7): 1141-3.
2. Prajapati NC, Kumar R, Gupta R, Pengoria R, Garg G. Rapunzel Syndrome – A Case Report. J MGIMS. 2012; 17(ii): 43-46.
3. Bouwer C, Stein DJ. Trichobezoars in Trichotillomania: Case report and literature review. Psychosom Med 2018; 60: 658-60.
4. Duncan ND, Aitken R, Venugopal S, West WM, Carpenter RA. The Rapunzel Syndrome. Report of Case and Review of the Literature. West Indian Med J-1994; 43: 63-5.
5. Diggikar PM, Satpathy PK, Kakrani AL. An adolescent girl with Rapunzel Syndrome. Medical Journal of Dr. D.Y. Patil University. 2013; vol 6 issue 2.

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4.

dr. Dwi Nugroho Prastowo, SpPD

Severe Hepatic Dysfunction in Patient with Graves disease: A Diagnostic and Therapeutic Challenge

CASE REPORT

SEVERE HEPATIC DYSFUNCTION IN PATIENT WITH GRAVES' DISEASE: A DIAGNOSTIC AND THERAPEUTIC CHALLENGE

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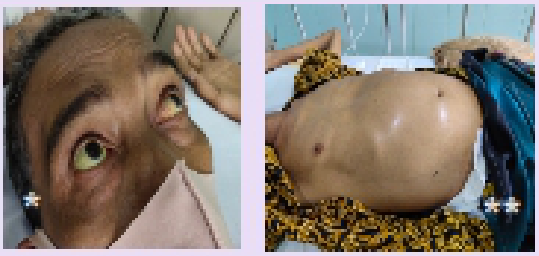
Background

Hepatic dysfunction in a patient with Graves' disease may result from hyperthyroidism per se, as a side effect of antithyroid drugs, and causes unrelated to hyperthyroidism which sometimes causes diagnostic and therapeutic difficulties.

Case description

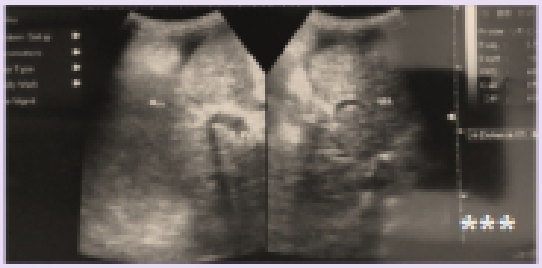
A 44-year-old man presented with hyperthyroidism, a history of jaundice, and had presented to another hospital before admission. Initial testing at this hospital a year before revealed severe hyperbilirubinemia, and negative serologic test results for hepatitis A, B, and C virus infection. He had been prescribed propylthiouracil (PTU) for more than 1 year without any improvement. A cholestatic pattern of jaundice was found on the first-time admission in our hospital (May 2020) and also hyperthyroidism finding, goiter, ophthalmopathy, tachycardia, tremulousness. Steroid therapy was initiated for a presumed diagnosis of autoimmune hepatitis, replace PTU to carbimazole and continuing beta-blocker, these give improvement biochemical parameters after 2 months follow up. However, after these initial improvements, he developed progressively ascites and peripheral edema. Abdominal ultrasound revealed chronic hepatitis with the cirrhotic pattern, portal hypertension, and splenomegaly, grade 3 ascites, without biliary dilatation. Child-Pugh-Tourette scoring giving result 11 (Child pugh C). Abdominal paracentesis was performed to ameliorate abdominal symptoms, and fluid examination shows SAAG 1,8 (high gradient). The patient was initially treated with intravenous furosemide and cefotaxime, and oral methimazole, propranolol, spironolactone, methylprednisolone, dietary sodium restriction, and discharge after a 5-day treatment.

Physical examination



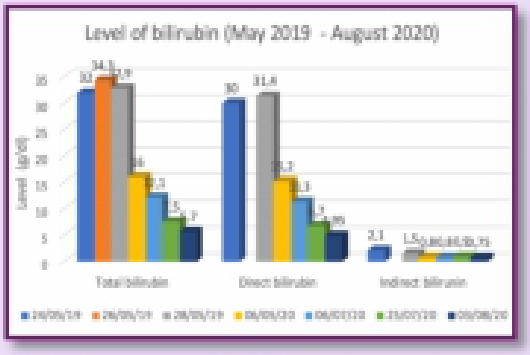
* ophthlmopathy and icterus, ** grade 3 ascites

Abdominal ultrasound



*** cirrhotic pattern, portal hypertension, and ascites

Laboratory examination



	24/05/19	06/05/20	06/07/20	03/08/20
AST (U/L)	68	50	87	42
ALT (U/L)	38	14	68	48
Total Protein (g/dl)	no data	2,5	3	3,5
Albumin (g/dl)	no data	1,3	2,4	2,6
Globulin (g/dl)	no data	1,2	0,6	0,89
Hemoglobin (g/dl)	11,1	11,5		11,3
WBC (cell/mm^3)	6210	8000		11600
Platelet (cell/mm^3)	167000	145000		127000
TSH (IU/L)	0,14	0,1		0,2
T3 (nmol/L)	2,41	4,2		3,9
T4 (nmol/L)	168	180		61,5

Conclusion

In this case report, we describe a patient with Graves' disease whose presentation with jaundice and hepatic dysfunction. Decompensated cirrhosis, in this case, maybe caused by hyperthyroidism itself, Thionamide (PTU) hepatotoxicity (drug induced liver injury), and presumed autoimmune hepatitis. It is recommended that liver function should be assessed in all patients with graves disease before and during treatment, and choosing that newer agent such as methimazole may reduce the deleterious side effect.

Keywords : Graves' disease, decompensated cirrhosis, autoimmune hepatitis, PTU, methimazole

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5.

dr. Randy Adiwinata

Symptomatic Autosomal Dominant Polycystic Liver Disease: Case Report with Updated Diagnostic and Management Approach

Symptomatic Autosomal Dominant Polycystic Liver Disease: Case Report with Updated Diagnostic and Management Approach

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BACKGROUND

Polycystic liver disease (PLD) is a rare disorder which often mistakenly as benign disease and no treatment required. PLD may be part of autosomal dominant polycystic liver disease (ADPLD) or autosomal dominant polycystic kidney disease (ADPKD); with the latter is more common. Several criteria may be used to distinguish ADPLD with ADPKD. Distinction is important as the monitoring, management, and prognosis may vary greatly.

CASE DESCRIPTION

A 73-year-old woman came to emergency department with progressively increased right upper quadrant (RUQ) abdominal pain since 3 months before admission. The pain was rated as six out of ten, according to Visual Analog Scale. Her remarkable past medical history is controlled hypertension. Her family history is unremarkable. On physical examination, she appeared moderately ill with blood pressure of 130/90 mmHg, heart rate of 82 bpm, respiration rate of 20x/minute, body temperature 37.0^{0}C. Abdominal examination showed tenderness on RUQ with hepatomegaly. The laboratory examination showed normal complete blood count and liver function. USG examination demonstrated multiple hepatic cystic lesion on both liver lobes. Contrast abdominal CT-scan result showed multiple simple hepatic cystic lesions with more than 20 cysts on both liver lobes sized 7.5 mm to 74.6 mm. Hepatic cystic lesions were found on all over liver segments except segment number 1. Simple left kidney cyst sized 25.7 mm x 20.6 mm was also detected on CT-scan. Based on CT-scan finding (Figure 1), she was diagnosed for having ADPLD with Schnelldorfer type C and Gigot type II. She was planned for cyst fenestration-deroofing via laparoscopic (Figure 2). The postoperative course was unremarkable and she was discharged on the third day of admission.

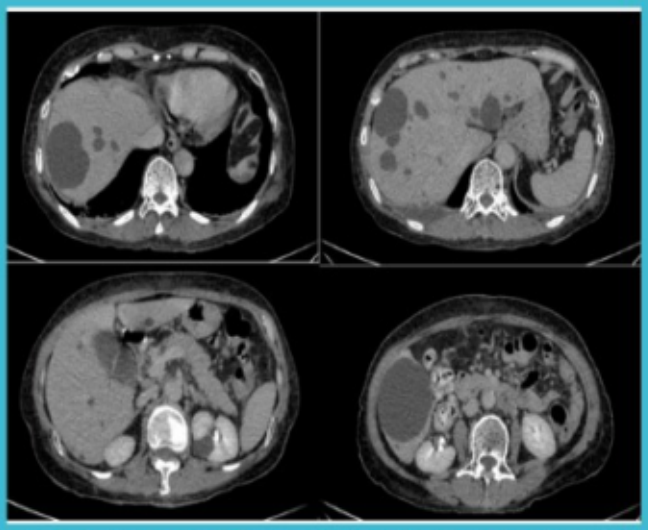

Fig. 1. Abdominal CT scan with contrast examination showed multiple simple liver cysts on both liver lobes and simple left kidney cyst.

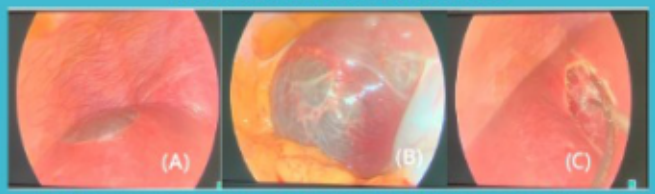

Fig. 2. Laparoscopic view showing the liver cysts (A,B); after deroofing of the cysts (C)

Table 1. The Schnelldorfer Classification Relates Symptom Burden to The Number of Liver Sectors Involved

	Type			
	A	B	C	D
Symptoms	Absent or mild	Moderate or severe	Severe	Severe
Cyst findings	Focal	Focal	Diffuse	Diffuse
Normal hepatic segments	> 3	> 2	> 1	< 1
Portal vein/hepatic vein occlusion	No	No	No	Yes

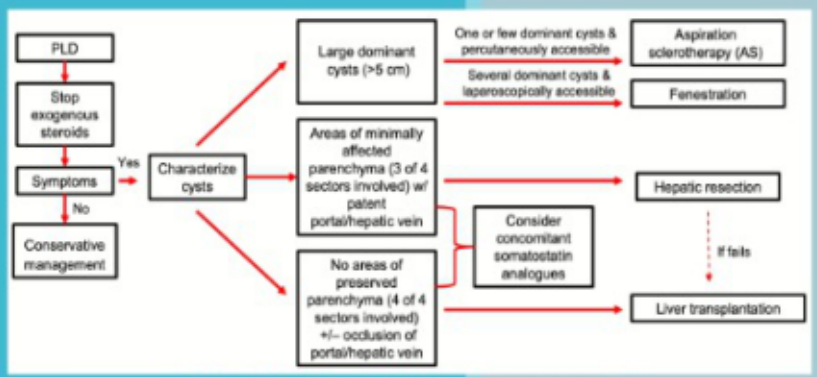

Fig 3. Algorithm for the medical and surgical management of PLD

DISCUSSION

ADPLD should be differentiated with ADPLD using established criteria (**Table 1**). ADPLD is a rare autosomal dominant disease (prevalence 1/100,000-1,000,000). ADPLD is linked with SEC63 and PRKCHS gene mutation. Several ADPLD risk factors were female gender, older age, multiple pregnancies, and oral contraceptive drug usage. Eighty percent of PLD patients are asymptomatic. Schnelldorfer classification may guide appropriate management (**Table 2**). ADPLD management consists of medical and surgical management (**Fig 3**).

CONCLUSION

Burden of liver cyst should be assessed in every ADPLD patient. Therapy which consists of medical and surgical management should be utilized for symptomatic ADPLD.

REFERENCES

1. Patel A, Chapman AB, Mikolajczyk AE. A Practical Approach to Polycystic Liver Disease. Clinical Liver Disease. 2019;14(5):176-9.
2. Van Aerts RMM, van de Laarschot LFM, Banales JM, Drenth JPH. Clinical management of polycystic liver disease. Journal of hepatology. 2018;68(4):827-37.

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6.

dr. Diki Pranatal Ramba Sibannang

A Man With Peritonitis Tuberculosis, Pulmonary Tuberculosis and Hematoschezia Suggestive Colitis Tuberculosis – a Case Report

A Man With Peritonitis Tuberculosis, Pulmonary Tuberculosis and Hematoschezia Suggestive Colitis Tuberculosis – a Case Report

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Background

Peritonitis Tuberculosis (PTB) is chronic granulomatous infections caused by gram-positive aerobic intracellular bacilli that slowly multiply and have a long incubation period. Peritonitis is an emergency cause of acute abdominal. Peritoneal Tuberculosis develops as a result of reactivation of latent TB.[1]

Case Description

A 60-years-old man entered Teluk Bintuni Hospital, with chief complaint abdominal pain that felt since 5 days ago, but worsening in the last 2 days. Abdominal pain accompanied by weakness in the entire body until its difficult to walk. Patient also complained yellow mucous cough, intermittent fever, chill, decreased appetite about 1 months before being hospitalized. Patient also have ascites, edema legs, and hematochezia since 3 months ago. The patient's previous medical history was diagnosed in 2019 with pulmonary tuberculosis but discontinued of treatment. The patient diagnosed with suggestive colitis tuberculosis due to hematoschezia and radiologically finding. Physical examination showed weak general condition and the vital sign in normal condition. In general examination revealed crackles from both lungs, lowered bowel sounds, ascites, no organomegaly was found.

Figure 1. Clinical Photo

Figure 2. X-Ray PA Thorax Photo, Increased bronchovascular streak with bilateral fibroinfiltrates, homogeneous opaque junction and meniscus sign in the right costophrenic

Figure 3 Abdomen Ultrasonography, Bilateral free abdominal fluid collection with fibrin strands was seen

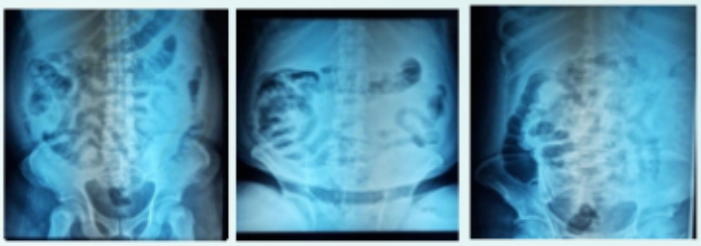

Figure 4. BNO 3 Position, AP Erect, AP Supine, and LLD position. Preperitoneal fat and psoas line cannot viewed. Lead pipe in colon transversum and thumbprinting in colon descendens at supine viewed. Thickened mucosa colon descendens possible colitis

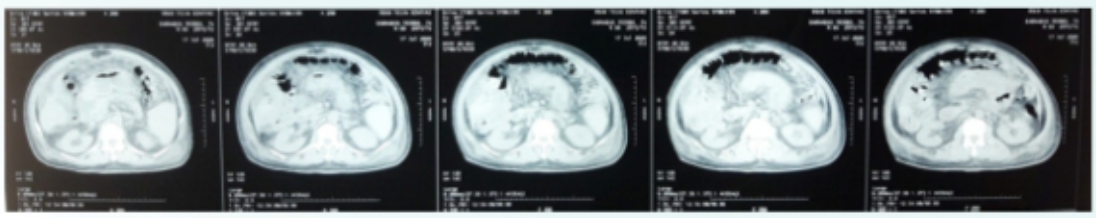

Figure 5. CT-SCAN no apparent intraabdominal mass, collection of intraperitoneal fluid

The laboratory findings showed slight anemia, high white blood cell, hypoalbumin, and hyponatremia. The patient was planned for ascites puncture but at the time of ascites fluid collection it is not available because there is not much fluid in the cavum peritoneum. The treatment for the patient was anti tubercular therapy 2nd category, Rifampicin 450 mg q24h, Izoniazid 300 mg q24h, Pirazinamid 1000 mg q24h, Etambutol 1000 mg q24h, and Streptomycin injection 500 mg q24h. Antibiotic injection, Correction hypoalbumin and hyponatremia and then decompression with nasogastric tube.

Discussion

There are three main pathways through which TB infects the peritoneum. In most cases, the bacterial spread is achieved by reactivation of TB in the lungs or other solid organ and subsequent hematogenous or lymphatic spread to the peritoneum.[1] The clinical features, diarrhea, hematochezia, perianal disease, while fever, night sweats, lung involvement and ascites favored the diagnosis of Colitis Tuberculosis. Ultrasonography and computed tomography CT scan may show generalized or localized ascites with thin mobile septa, thick omentum and peritoneum, lymphadenopathy, or thickened bowel[2,3]
Treating with steroids in such a situation would be disastrous if the patient has underlying Peritonitis Tuberculosis, and therefore, this dilemma is circumvented with a therapeutic anti-tubercular therapy (ATT) trial. Treatment start use anti-tubercular therapy (ATT), using corticosteroid which has immunosuppressant side effect can activate M.Tb. Treatment of peritonitis tuberculosis with anti-tubercular therapy start 2-3 months after ATT and continue with corticosteroid.[2,3] In this patient was clinical recovery respond with ATT.

Summary

This case emphasizes that clinicians should keep in mind that pulmonary tuberculosis patients can develop peritonitis tuberculosis in the same time. Thus they should be followed up closely and screening once they diagnosed with pulmonary tuberculosis.

Reference

1. Wu DC, Averbukh LD, Wu GY. Diagnostic and Therapeutic Strategies for Peritoneal Tuberculosis: A Review. J Clin Transl Hepatol. 2019 Jun 28;7(X):1–9.
2. Kedia S, Das P, Madhusudhan KS, Dattagupta S, Sharma R, Sahni P, et al. Differentiating Crohn's disease from intestinal tuberculosis. World J Gastroenterol. 2019 Jan 28;25(4):418–32.
3. Abu-Zidan FM, Sheek-Hussein M. Diagnosis of abdominal tuberculosis: lessons learned over 30 years: pectoral assay. World J Emerg Surg. 2019 Dec;14(1):33.

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7.

dr. Hary R.Supit

The Relationship of Alcohol Consumption with the Occurrence of Erosive Gastritis in Endoscopic Patients

THE RELATIONSHIP OF ALCOHOL CONSUMPTION WITH THE OCCURRENCE OF EROSIVE GASTRITIS IN ENDOSCOPIC PATIENTS OF THE OUTPATIENT GASTROENTEROLOGY CLINIC

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BACKGROUND

- RISKESDAS 2018 has reported that the highest proportion of alcohol consumption of the whole Indonesian population is found in the province of North Sulawesi (16%).
- BPOM has found that the alcohol circulating in the community had methanol levels of 40%, which exceeded the regulated maximum limit.
- A high concentration of alcohol can induce and disrupt endothelial vascularization of the gastric mucosal layer.
- Li G et al 2018 have reported that the increase of alcohol concentration consumed is directly proportional to the amount of damaged tissues' cell nucleus linked with caspase 1.
- The high number of medical treatment visits in the outpatient clinic of gastroenterology of the Prof.R.D. Kandou Manado may be related to the high number of alcohol consumption in the community.

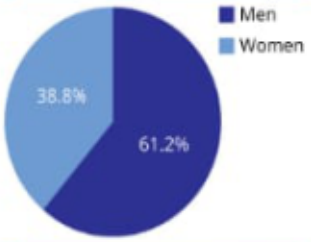
METHOD

Descriptive analytical design using a cross-sectional approach was used, observing 67 patients aged over 17 years of whom had undergone esophagoduodenoscopy and was diagnosed with erosive gastritis, with a history of alcohol use from the outpatient gastroenterology department of Internal Medicine Hospital in July to October 2019.

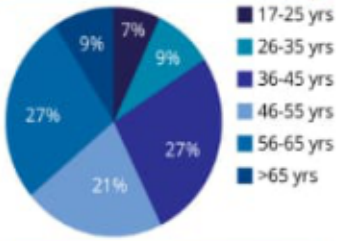
RESULT

- The research reported that from a total of 67 respondents, 44 (65.7%) respondents consumed alcohol and 23 (34.3%) respondents do not. Male respondents consume more alcohol at 41 (61.2%), compared to females at 26 (38.8%).
- The most frequent age category is both the 36-45 years and 56-65 years of age, both comprised of 18 respondents (26.9%).
- From the 44 respondents consuming alcohol, 43 suffered from erosive gastritis, with the most consumed type of alcohol being: beer at 17 respondents (23.9%), tuak at 18 respondents (25.4%), liquor at 8 respondents (12.7%), and wine at 1 respondent (3.7%).
- There was a significant relation between alcohol consumption and erosive gastritis (p = 0.000).

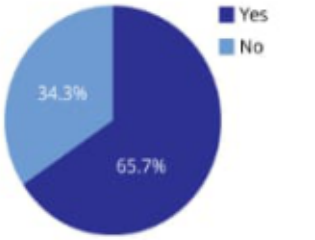
FREQUENCY ACCORDING TO GENDER



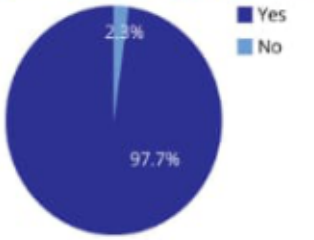
FREQUENCY ACCORDING TO AGE



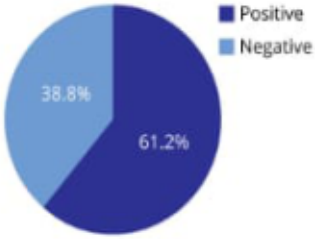
FREQUENCY OF RESPONDENTS WHO CONSUMED ALCOHOL



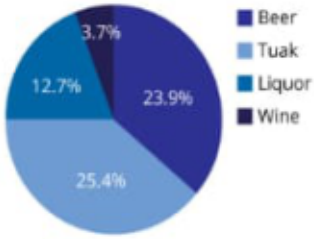
FREQUENCY OF RESPONDENTS WHO OCCURED EROSIVE GASTRITIS



FREQUENCY OF RESPONDENTS HAS H. PYLORI



FREQUENCY OF ALCOHOL CONSUMED BY RESPONDENTS



DISCUSSION

Chance of developing erosival gastritis (OR = 27.64) can be caused by the high amount of alcohol consumed by the public. Indonesian Food and Drug Administration (BPOM) has found commercial alcohol drink contained up to 40% methanol. This finding is supported by research of LG, 2018, which has obtained that the greater of ethanol concentration affected more cells that has caspase I binds to the nucleus cell. Caspase I plays a role in gastric mucosal damage.

CONCLUSION

There was a significant relation between alcohol consumption and erosive gastritis. The findings are supported by the research of Song Lin et al, 2019 (p < 0.001).

REFERENCES

1. G Li, L Zhu, Z Cao, et al. A new participant in the pathogenesis of alcoholic gastritis: pyroptosis. Cellular physiology and biochemistry. 2018. 410
2. Lin S, Gao T Sun C, Jia M, et al. Association of dietary patterns and endoscopic gastric mucosal atrophy in adult Chinese population. Natureresearch. 2019. 1-7

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8.

dr. Fauzan Azhari

Amoebic Liver Abscess After Perforated Appendicitis Laparotomy A Case Report

Amoebic Liver Abscess After Perforated Appendicitis Laparotomy: A Case Report

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Introduction

The incidence of liver abscess in Indonesia hospitals accounts for 5-15% per year. Liver abscess can be classified into two different categories: amoebic and pyogenic liver abscess. The most common symptoms of liver abscess are pain in the upper right quadrant of abdomen, fever, diarrhea and loss of appetite

Case Presentation

History

A 32-years old male was present with abdominal pain in the upper right since 2 months before admitted to the hospital. The pain did not spread to another area and accompanied by an enlargement in the upper right, yellowish of the eyes, fever, nausea and vomiting. The patient had a history of laparatomy due to perforated appendicitis one week ago.

Physical examination

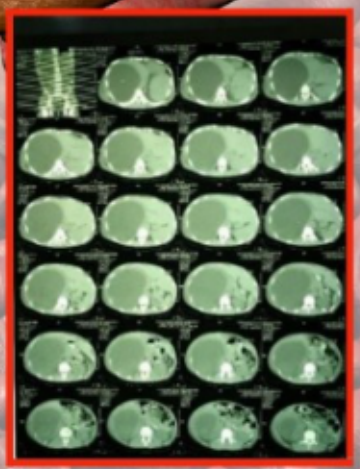
Temperature was 38.5 C, conjunctival pallor, scleral icterus, dullness percussion at right hemithorax and decreased breath sound on the right hemithorax starting at the fourth intercostal space. Abdominal examination revealed a mass in the right upper quadrant of abdomen 15x15 cm in size, positive murphy sign and positive ludwig sign.

Diagnostic Testing

Laboratory testing :
Leucocytes: 20,300/mm3, Total Bilirubin: 2.60mg/dL, Direct Bilirubin: 1.70 mg/dL, Indirect Bilirubin: 0.90 mg/dL

Abdominal USG: Enlarged liver with flat surface

Thorax X-ray: hazy opacification starting at the fourth intercostal space



Abdominal CT-scan: Hepatomegaly with right lobe liver abscess

Abscess fluid: Amoeba visualization

Diagnosis

Giant Amoebic Liver Abscess

Treatment

- ***Ceftriaxone 2 x 1 g IV***
- ***Metronidazole 3 x 500 mg IV***
- ***Ketorolac 3 x 30 mg IV***
- ***Abscess Drainage***

Conclusion

- Amoebic liver abscess is more often associated with acute clinical presentations than pyogenic liver abscess
- Jaundice is a rare finding, when presented it indicates poor prognosis
- Abdominal ultrasound is the first choice for initial testing, because it is non-invasive and has a high sensitivity (80-90%)

References

1. Nusi IA. Abses hati amuba. Dalam: Setiati S, Alwi I, Sudoyo AW, Sumadibrata M, Setyohadi B, Syam AF, editors. Buku ajar ilmu penyakit dalam. 6th ed. Jakarta: Internal Publising; 2014. hal.1991-1995.
2. Julius. Abses hati. Dalam: Sulaiman A, Akbar N, Lesmana LA, Noer MS, editor. Buku ajar ilmu penyakit hati. Jakarta: Sagung Seto; 2012. hal.487-492.
3. Kibbler CC. The liver in infections. In : Dooley JS, Lok A, Burroughs AK, Heathcote J, editors. Sherlock's diseases of the liver and biliary system. 12th ed. New York: Wiley-Blackwell; 2011. p.632-659.

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9.

dr. Betty Rachma

The Role of Zinc Supplementation in Adults with Acute Diarrhea: An Evidence-Based Case Report

The Role of Oral Zinc Supplementation in Adults with Acute Diarrhea: An Evidence-Based Case Report

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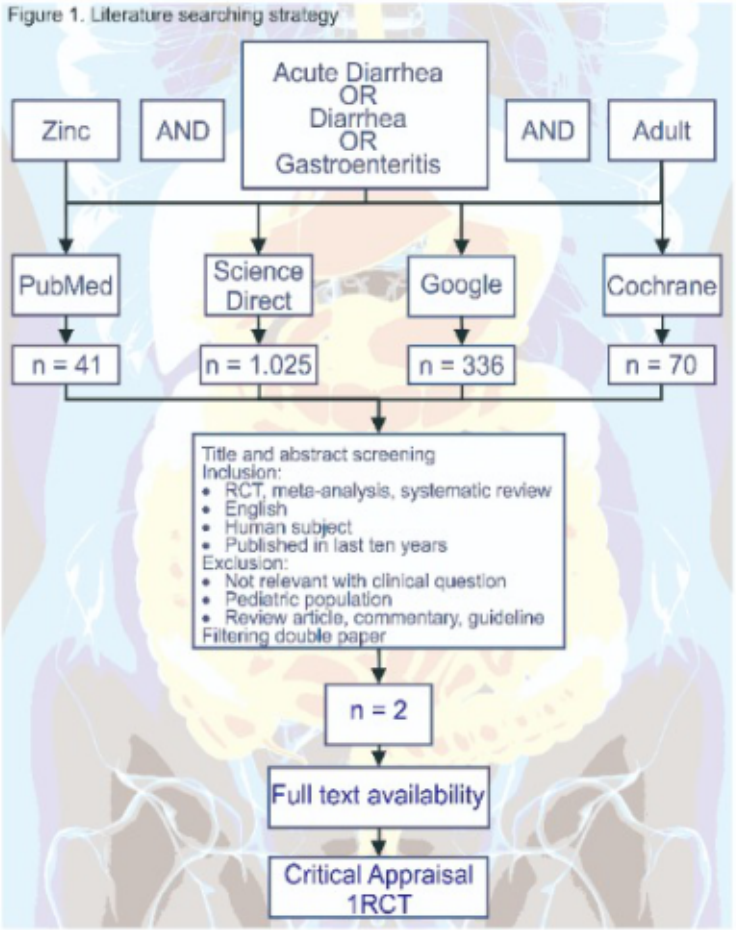
Background

Acute diarrhea in adult is one of the most common diagnoses in general practice.[1] Zinc-supplementation is proven to reduce the duration and severity of childhood diarrhea in randomized controlled trials.[2] However, its efficacy in reducing diarrhea morbidity in adults remains unknown. The objective of this study is to determine the role of zinc supplementation as adjuvant therapy in adults with acute diarrhea.

Methods

An electronic literature search was conducted on PubMed, ScienceDirect, Google Scholar, and Cochrane according to clinical query terminology. The studies were selected based on inclusion and exclusion criteria, and then critically appraised for their validity, importance, and applicability.

Figure 1. Literature searching strategy



Result

From 4 journal databases, we found 1.472 studies related with the terminology. Through title and abstract screening, using inclusion and exclusion criteria, and full text availability, only 1 randomized control trial conducted in adult diarrhea patients and fully accessible. Therefore, only 1 study was eligible to this research.

Table 1. Critical appraisal based on Centre for Evidence-Based Medicine University of Oxford

	Validity					Importance			Applicability
Author	Randomization	Similarity of groups	Equally treated	Intention to treat	Blinding	CER, EER, RR, ARR, RRR, NNT.	Patient similarity	Feasible treatment	Potential benefit
Kostermans et al	+	+	+	+	+	-	+	+	+

+ Stated clearly in the article; - not stated clearly;
CER: control event rate; EER: experimental event rate; RR: relative risk; ARR: absolute risk reduction; RRR: relative risk reduction; NNT: number needed to treat

Table 2. Summary of the study

Author	Number of patients	Methods	Intervention	Control	Result
Kostermans et al[3] (2014)	84 patients (30 males, 54 females)	Double-blind, RCT	Zinc sulphate 20 mg twice a day, for 7 days	Placebo	Zinc supplementation significantly reduced the duration of acute diarrhea (p=0.027) and reduced nausea (p=0.032).

The study of Kostermans et al., found that Zinc supplementation significantly reduced the duration of acute diarrhea in adult patients(p=0.027), and reduced nausea (p=0.032). The positive action by zinc derives from a intestinal fluid transport regulation, stimulates enterocyte growth and differentiation, reduces intestinal permeability, and positively regulates oxidative stress and inflammation.[4] Research in children suggests that zinc supplementation decreased dehydration risk, the duration, and diarrheal severity episode by an estimated 20% to 40%.[5] Further research is needed to evaluate potential benefits of zinc supplementation in adult population with bigger sample size and more centers involved.

Conclusion

Zinc supplementation can be considered to be an additional therapy in adult acute diarrhea patients. However, further studies with bigger sample size and more centers involved are needed to confirm the finding.

References

1. Hou, F., Wang, Y., Li, J., Wang, G. and Liu, Y., 2013. Management of acute diarrhea in adults in China: a cross-sectional survey. BMC Public Health, 13(1).
2. Muller O. Effect of zinc supplementation on malaria and other causes of morbidity in west African children: randomised double blind placebo controlled. BMJ. 2001;322(7302):1567-1567.
3. Kostermans D, Sirasitbrara M, Hasan I. The Effect of Zinc Supplementation in Adult Patients with Acute Diarrhea. The Indonesian Journal of Gastroenterology, Hepatology, and Digestive Endoscopy. 2014.
4. Canani RB, Roberto, Buccigrossi V, Passariello A. Mechanisms of action of zinc in acute diarrhea. Current opinion in gastroenterology. 2011; 27. 8-12. 10.1097/MOG.0b013e32833fd8a.
5. Barr, W. and Smith, A., 2014. Acute Diarrhea in Adults. American Family Physician, 89(Feb 1;89(3)), pp.180-189.

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10.

dr. Novita Tanasal

Colorectal Cancer Profile at Prof Dr. R. D. Kandou Hospital and Siloam Hospital Manado from 2018 To 2019

COLORECTAL CANCER PROFILE AT PROF DR. R. D. KANDOU HOSPITAL AND SILOAM HOSPITAL MANADO FROM 2018 TO 2019

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BACKGROUND

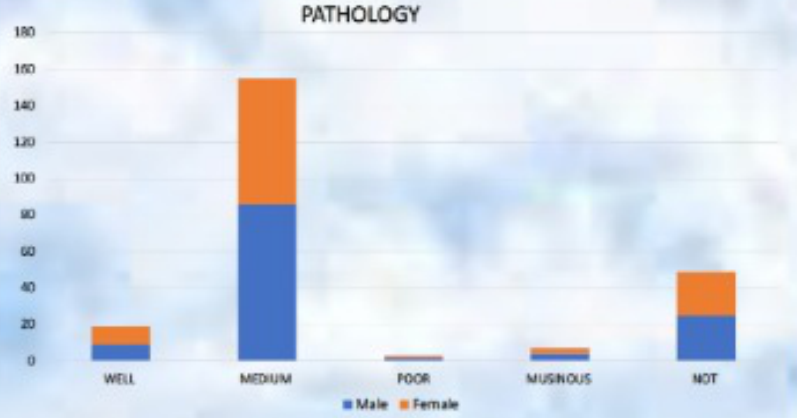
Colorectal cancer is the third most commonly diagnosed malignancy and is the leading cause of cancer deaths in the world. The Global Cancer Observatory (GLOBOCAN) 2018 reports the incidence of colorectal cancer ranked third in the world with 1.8 million cases of all types of cancer. And in Indonesia the number of cases of colorectal cancer has reached 30,017 cases.

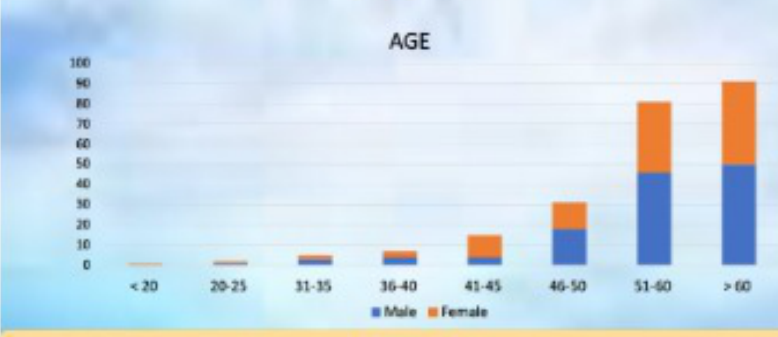
METHOD

Retrospective descriptive study using medical record data at Endoscopy Center Prof. Dr. RD Kandou and Siloam Hospital Manado from January 2018 to December 2019.

RESULTS

In this study there were 233 patients with colorectal cancer, a large number of patients were 126 male patients (54, 1%) and 107 female patients (45.9%). The highest incidence of colorectal cancer is at the age of more than 60 years, where in male 50 patients (21.4%) and in female 41 patients (17.5%). The youngest age is 18 years in female, and in male 24 years. The most common type of pathology is moderately differentiated adenocarcinoma, in which 86 male patients (36.9%) and 69 female patients (29.6%). The least poorly differentiated adenocarcinoma was found, where in male 2 patients (0.8%) and in female 1 patient (0.4%). The most common locations for colorectal cancer were found in the rectum, where 69 male patients (29.6%) and 43 female patients (18.4%). The fewest locations were found in the hepatic flexure, where in both male and female each was 2 patients (0.8%).





CONCLUSION

Colorectal cancer is most common among men, over 60 years of age, with the type of adenocarcinoma being moderately differentiated and the most common location in the rectum.

REFERENCES

1. Arnold M, Sierra M, Laversanne M, Soerjomataram I, Jemal A, Bray F. Global patterns and trends in colorectal cancer incidence and mortality. 2016, January.
2. Yayasan Kanker Indonesia. Kanker kolorektal (citied April 2018). Available from: http://yayasankankerindonesia.org/storage/article/8862ae79118c0477547330d56fdd408a.pdf
3. International Agency for Research on Cancer, World Health Organization. Fact sheets by population, incidence, mortality and 5-year prevalence: both sexes Indonesia. [cited 2019 May]. Available from: https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-fact-sheets.pdf.
4. Safrianti D, Faktor Risiko Kejadian Kanker Kolorektal di RSUP DR. M. Djamil Padang. Fakultas Kesehatan Masyarakat. Universitas Andalas. Padang. 2016.
5. Komite Penanggulangan Kanker Nasional. Pedoman Nasional Pelayanan Kedokteran Kanker Kolorektal. Jakarta, 2014.

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11.

dr. Sri Pramesthi Wisnu Bowo Negoro

Asymptomatic Non-Alcoholic Fatty Liver Disease (NAFLD) in Young Woman 29 Years Old

ASYMPTOMATIC NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) IN YOUNG WOMAN 29 YEARS OLD

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BACKGROUND

Non-Alcoholic Fatty Liver Disease (NAFLD) has become the common cause leading to chronic liver disease recently and known to show a strong association with DM, CKD, cardiovascular disease or cerebrovascular disease as well as high cancer incidence of 1.3 hazard ratio (HR), especially 16.7 HR for hepatocellular carcinoma respectively. Early diagnosis is important, as the condition is associated with increased risks of disease progression.

CASE DESCRIPTION

A woman 29 y.o came to ER with mild head injury without any symptoms. Her blood pressure was 150/90 mmHg with no history of hypertension. The woman neither drank alcoholic beverages nor smoked cigarettes earlier, but still prefer to eat oily snack and food. Her Height was 145 cm, her body weight was 58.4 kg, Her BMI was 27.7 and her waist circumference was 86.5 cm. Her laboratory test was ALT 83 U/L and AST 136 U/L, normal Random Blood Glucose 169 mg/dL, Increased Total Cholesterol 256 mg/dL, low LDL 38 mg/dL, low HDL 22 mg/dL, and excessive increased of triglyceride 1783 mg/dL. Abdominal sonography test found hepatomegaly with sign of fatty liver grade II-III. Her final diagnosed was Non-alcoholic Fatty Liver Disease and Metabolic Syndrome then treated with Fenofibrat 1 x 300mg, Atorvastatin 1 x 20mg, and Livapro 3 x 1 caps.

CONCLUSION

This case shows that there is an increase in prevalence of NAFLD in young adult without any symptoms with excessive increased of triglyceride. So, Screening and early detection really important to reduce the risk of complication, morbidity, and mortality.

REFERENCE

1. Son C-G. A juvenile case with nonalcoholic steatohepatitis and traditional Korean medicine-based treatment. Integr Med Res. 2018;7(2):206–9.
2. Anstee QM, Targher G, Day CP. Progression of NAFLD to diabetes mellitus, cardiovascular disease or cirrhosis. Nat Rev Gastroenterol Hepatol. 2013;10(6):330–44.
3. Airaghi L, Rango M, Maira D, Barbieri V, Valenti L, Lombardi R, et al. Subclinical cerebrovascular disease in NAFLD without overt risk factors for atherosclerosis. Atherosclerosis. 2018;268:27–31.
4. Kim GA, Lee HC, Choe J, Kim MJ, Lee MJ, Chang HS, et al. Association between non-alcoholic fatty liver disease and cancer incidence rate. J Hepatol. 2018;68(1):140–6.
5. Byrne CD, Targher G. NAFLD: A multisystem disease. J Hepatol [Internet]. 2015;62(S1):S47–64. Available from: http://dx.doi.org/10.1016/j.jhep.2014.12.012
6. Wong T, Wong RJ, Gish RG. Diagnostic and treatment implications of nonalcoholic fatty liver disease and nonalcoholic steatohepatitis. Gastroenterol Hepatol. 2019;15(2):83–9.

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12.

dr. Ni Wayan Wina Dharmesti

Characteristic Of Hepatitis C Infection in Regular Hemodialysis Patients: Efficacy of Direct Acting Antiviral Treatment (elbasvir/grazoprevir)

CHARACTERISTIC OF HEPATITIS C INFECTION IN REGULAR HEMODIALYSIS PATIENTS: EFFICACY OF DIRECT ACTING ANTIVIRAL TREATMENT (ELBASVIR/GRAZOPREVIR)

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Correspondence: Ni Wayan Wina Dharmesti/Email: wina_dharmesti@yahoo.com

BACKGROUND

Hepatitis C infection is common in end stage renal disease (ESRD) patients undergoing regular hemodialysis, with prevalence is approximately 10%-20% patients. The emergence of new direct acting antivirals, Elbasvir/Grazoprevir (EBR/GZR), has studied to be safe and effective for patients with end stage renal disease on regular hemodialysis.

METHODS

Retrospective observational (analytic cross-sectional) study :

- End stage renal disease patients undergoing regular hemodialysis with Hepatitis C infection
- Gastro-Hepatology outpatient clinic Sanglah General Hospital (July 2019-March 2020)
- Characteristic of patients: age, gender, initial level of HCV RNA, ALT, AST, platelet count, and degree of fibrosis using APRI score.
- Efficacy of treatment (EBR/GZR): level of HCV RNA 12 weeks post therapy (SVR12).
- Inclusion criteria: dialysis patient age >18 years old with detectable HCV RNA and seronegative for Hepatitis B and HIV infection.

CHARACTERISTIC	TOTAL SAMPLE (n: 30)
Gender	
Male	22 (73.3%)
Female	8 (26.7%)
Age, yo (mean)	50.77 ± 13.90 (20-85)
HCV RNA, equivalents/mL (mean)	$5.66 \times 10^6 \pm 1.68 \times 10^7$ (900-9×10^7)
ALT, U/L (mean)	53.72 ± 51.8 (6.90-237.4)
AST, U/L (mean)	39.60 ± 24.05 (6.40-103.7)
Platelet count, $\times 10^3$ mm^3 (mean)	192.40 ± 78.55 (58.80-444.90)
APRI score (mean)	0.76 ± 0.62 (0.10-2.50)

RESULTS

- 53.3% of patients have normal ALT level
- AST level is elevated in 53.3% of patients
- 63.3% of patients have normal platelet count
- APRI score: 2 patients have score ≥2)

Initial HCV RNA level has significant correlation with:

- AST level (r= 0.439, p 0.015)
- Platelet count (r= -0.379, p 0.039)
- APRI score (r= 0.479, p 0,0007)

PROPORTION OF PATIENT TREATED WITH EBR/GZR

SVR12 is achieved in all patient with complete 3 month course of antiviral therapy.

CONCLUSION

- Characteristic of our patient is elder male with high viral loads, elevated AST level, significant degree of fibrosis, and normal level of ALT and platelet count.
- Treatment with EBR/GZR is effective in achieving SVR12 in patients who have completed course of therapy.

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13.

dr. M. Fathi Ilmawan

Hyperbaric Oxygen Therapy Improved the Histopathological Features of Gastric Mucosa in Aspirin-induced Wistar Rats

Hyperbaric oxygen therapy improved the Histopathological features of gastric Mucosa in aspirin-induced Wistar rats

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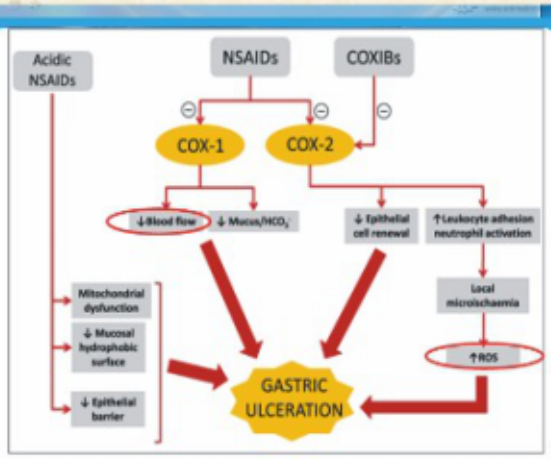
Background

- Gastritis, inflammation or erosion of the lining of the stomach, may cause someone to seek medical help.
- One of the most frequent causes of gastritis is the consumption of non-steroidal anti-inflammatory drugs (NSAIDs), such as aspirin. Aspirin exerts its anti-inflammatory effects through inhibition of cyclooxygenase enzymes (COX), resulting in reduced blood flow and increased reactive oxygen species (ROS).



Pathophysiology of gastritis due to NSAIDs (Fornai, et al. 2011)

- Hyperbaric oxygen therapy (HBOT) could promote tissue survival by modifying ischemia and ROS activity.

Hypothesis of hyperbaric oxygen therapy(Suryokusumo, 2015)

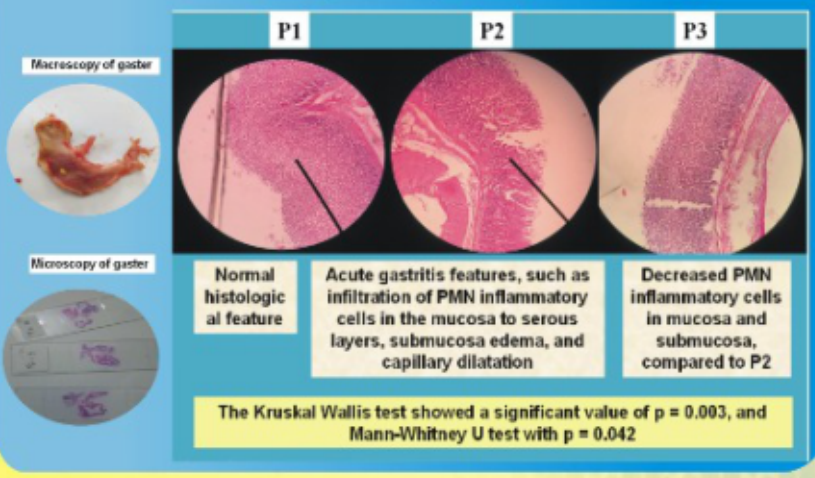
- The aim of this study was to determine the effects of HBOT on the histopathological features of gastric mucosa in aspirin-induced Wistar rats.

Methods

Epithelial integrity score (Manja Barthel, 2003)

Score	Integrity of the mucosal epithelium
0	No pathological changes
1	Epithelial desquamation
2	Erosion of the epithelial surface
3	Epithelial ulceration

Results



The Kruskal Wallis test showed a significant value of p = 0.003, and Mann-Whitney U test with p = 0.042

Test Statistics[a,b]

	Hasil PA
Kruskal-Wallis H	16.000
df	4
Asymp. Sig.	.003

a. Kruskal Wallis Test
b. Grouping Variable: Kelompok

Test Statistics[a]

	Hasil PA
Mann-Whitney U	4,000
Wilcoxon W	19,000
Z	-2,032
Asymp. Sig. (2-tailed)	.042
Exact Sig. [2*(1-tailed Sig.)]	,095[b]

a. Grouping Variable: kelompok
b. Not corrected for ties.

Conclusion

The administration of HBOT improved the histopathological feature of gastric mucosa in aspirin-induced Wistar rats.

Keywords : Gastric mucosa (sub mucosa) erosion, aspirin, hyperbaric oxygen therapy

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14.

dr. Andica Diatama

Proton Pump Inhibitor as Gastrointestinal Bleeding Management in Percutaneous Coronary Intervention Case: A Systematic Review and Meta-Analysis

Proton Pump Inhibitor as Gastrointestinal Bleeding Management in Percutaneous Coronary Intervention Case: A Systematic Review and Meta-Analysis

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Background

- Dual antiplatelet therapy (DAPT) is recommended for acute coronary syndromes and especially after Percutaneous Coronary Intervention (PCI).[1]
- Overall GI bleeding (GIB) has the hazard ratio of 4.87 for mortality in patients undergoing coronary interventions and 30-day mortality rate of 20.5% compared to 2.4% patients without GIB.[2,3]
- The objective of this study is to synthesize the evidence of the effect of PPI on gastrointestinal bleeding outcomes in a PCI patient population.

Methodology

Medline and Cochrane databases were searched for RCTs with included keywords :
- Proton pump inhibitors
- Gastrointestinal bleeding
- Percutaneous coronary intervention

All non-RCT trials were excluded.

Statistical analysis was done using RevMan version 5.4.

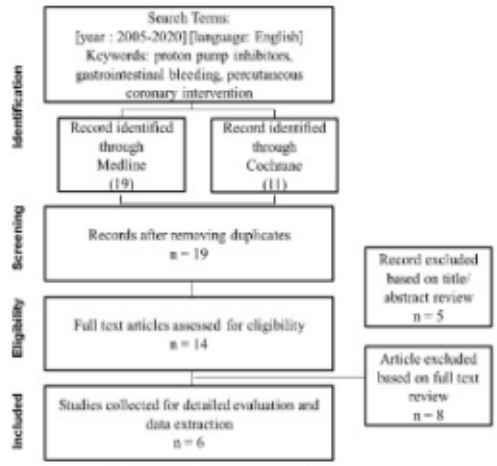

Figure 1. PRISMA Flow Diagram

Table 1. Included articles

No	Study	Study design	Original study selection criteria	Antiplatelet dose	Intervention vs comparisons	Follow-up time	Reported outcomes
1	Gao et al. 2008	Prospective double-blinded, placebo controlled, randomized trial	Patient who underwent coronary stenting due to ACS with onset less than 24h	Not mentioned	Omeprazole vs placebo	14 days	GI events, CV events, All-cause death
2	Bhatt et al. 2010	Prospective, multicenter, randomized, double-blind placebo-controlled trial	Patient at least 21 years of age or older, on routine antiplatelet including ACS patients underwent coronary stenting and were randomized into COGENT trial	Maintenance : Aspirin 75 - 325 mg daily and Clopidogrel 75 mg daily	Omeprazole vs placebo	180 days	GI endpoint, CV endpoint, Cerebrovascular events, All-cause death
3	Wu et al. 2011	Prospective, multicenter, randomized, double-blind placebo-controlled trial	Patient with ACS including STEMI, NSTEMI and UAP with high GI bleeding risk	Loading : Aspirin 300 mg and Clopidogrel 300 mg Maintenance : Aspirin 75 - 150 mg daily and Clopidogrel 75 mg daily Anticoagulant: Enoxaparin 1 - 2 mg/kg body weight daily	Pantoprazole vs placebo	12 days	GI events, HAP incidence, All-cause death
4	Ren et al. 2011	Prospective RCT	Patient with high-risk ACS undergoing elective coronary stenting	Loading : Aspirin 300 mg and Clopidogrel 600 mg Maintenance : Aspirin 100 mg daily and Clopidogrel 75 mg daily	Omeprazole vs placebo	30 days	Platelet reactivity, GI events, CV events, Cerebrovascular events
5	Huang et al. 2017	Prospective RCT	Patient who underwent primary PCI due to AMI	Loading : Aspirin 300 mg and Clopidogrel 300 mg Maintenance : Aspirin 100 mg daily and Clopidogrel 75 mg daily	Lansoprazole vs placebo	360 days	PGE_2 level, Platelet aggregation rate, GI events, CV events
6	Jensen et al. 2017	Prospective, multicenter, randomized, double-blind placebo-controlled trial	Patient who underwent primary PCI for the first-time	Maintenance : Low dose aspirin and low dose clopidogrel	Pantoprazole vs placebo	360 days	GI events, CV events, All-cause death

Results

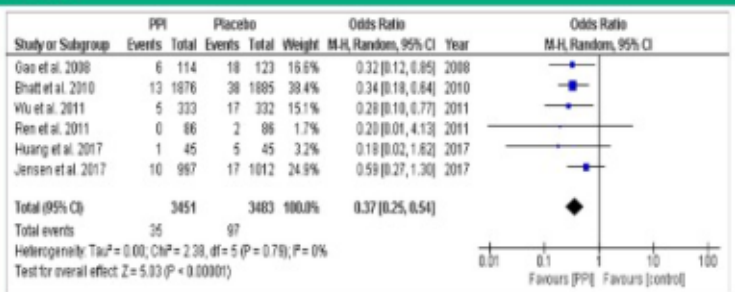

Figure 2. Meta-Analysis of GIB outcomes in PCI patients administered with PPI vs Placebo

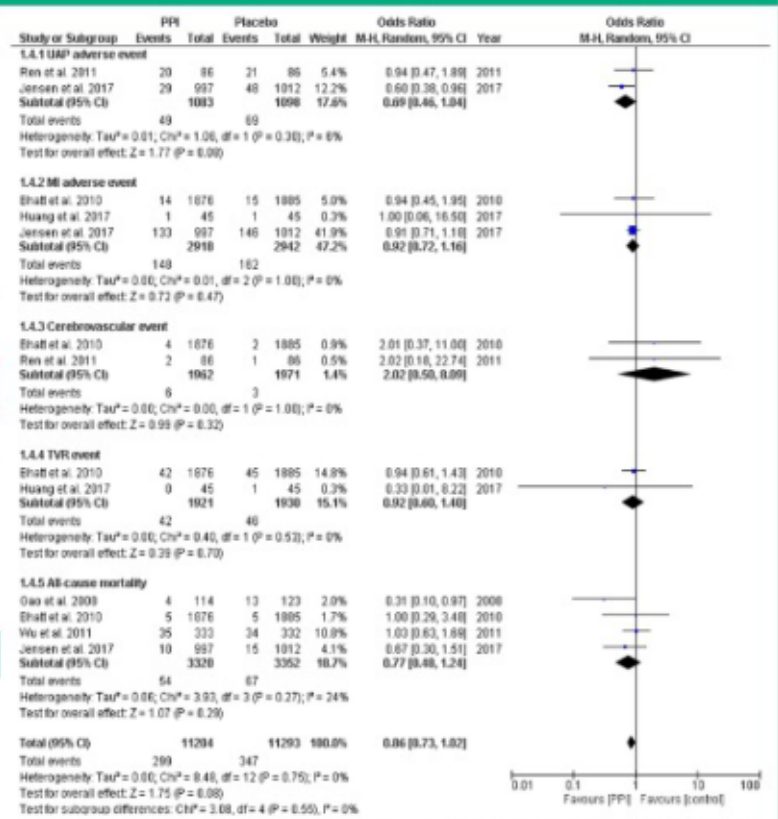

Figure 3. Meta-Analysis of MACE and other endpoints in PCI patients administered with PPI vs Placebo

Conclusion

- This meta-analysis confirms that concomitantly administered PPIs with DAPT have a significant protective effect on the GI bleeding events. Thus, PPI is recommended in those PCI patients with or without prior history of GI bleeding and presently on routine DAPT.
- PPI as class effect is not superior than placebo in regard to prevent MACE endpoint. Further studies evaluating PPI as drug effect in PCI patients were needed.

References

1. Yasuda H, Matsue Y, Sato Y, Ozawa S-I, Inagaki S, Yamashita M, et al. Treatment and prevention of gastrointestinal bleeding in patients receiving antiplatelet therapy. Vasc Health Risk Manag [Internet]. 2015 Feb 4;4(1):40–6. Available from: https://pubmed.ncbi.nlm.nih.gov/25685721
2. Nikolsky E, Stone GW, Kirtane AJ, et al. Gastrointestinal bleeding in patients with acute coronary syndromes: incidence, predictors, and clinical implications: analysis from the ACUITY (Acute Catheterization and Urgent Intervention Triage Strategy) trial. J Am Coll Cardiol. 2009;54(14):1293-1302. doi:10.1016/j.jacc.2009.07.019
3. Gaglia MA Jr, Torguson R, Gonzalez MA, et al. Correlates and consequences of gastrointestinal bleeding complicating percutaneous coronary intervention. Am J Cardiol. 2010;105(8):1069-1074. doi:10.1016/j.amjcard.2010.06.011

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15.

dr. Muhammad Riefky Putra Agusti

**Acute Liver Failure on
23 Years Old Man and Acute Kidney Injury due
to Hepatitis C Virus**

Acute Liver Failure and Acute Kidney Injury due to Hepatitis C Virus on 23 Years Old Man

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*General Practicioner - General Practicioner at Rumah Sakit Umum Daerah Kabupaten Bekasi
**Internist - Internist at Rumah Sakit Umum Daerah Kabupaten Bekasi

INTRODUCTION

Acute liver failure (ALF) is characterized by acute liver injury, hepatic encephalopathy, and an elevated prothrombin time/international normalized ratio (INR). It also has been referred to as fulminant hepatic failure, acute hepatic necrosis, fulminant hepatic necrosis, and fulminant hepatitis. [1]

Viral hepatitis is the most common caused of ALF. Around 40-60% of patients with ALF suspected having a viral infection. The examination was found negative in serological markers for hepatitis A virus (HAV) and hepatitis B virus (HBV), being classified as non-A non-B (NANB) hepatitis which are now called Hepatitis C Virus-Assoiated Liver Failure. [2]

CASE REPORT

A 23 years old male was admitted to Rumah Sakit Umum Daerah Kabupaten Bekasi with history of yellow discoloration of sclera since 7 days ago and altered state of consciousness since 1 day ago. Based on Anamnesa, he had no history of others diseases like diabetes, hypertension or chronic liver disease. According to Physical examination, he had jaundice, flapping tremors and liver was not palpable.

His examination lab showed AST 461 U/L, ALT 1383, U/L, total bilirubin 2.7 mg/dl, albumin 3 g/dl, PT prolonged 2 sec, creatinine 2.6 mg/dL, glomerular filtration rate (GFR) 33.3 ml/min/L, D Dimer 4.0, thrombocytes 70.000/uL. USG showed normal intra-abdominal organs. His viral hepatitis screening showed HBsAg was negative, his Anti HCV was positive. The Managements for the patients are N-Acetylsistein 45 ml for the first hour and then 15 ml for the next 4 hours and 60 ml for the next 67 hours. Ondansentron 3x8 mg, lansoprazole 1x20 mg, SNMC 1x1 amp, curcuma 3x1 tablet, ceftriaxone 1x2 gr were administered.

After a few days, patient developed progressed acute kidney injury showed with anuria and decreased glomerular filtration rate to 5.3 mL/min/L and creatinine 11.8 mg/dL.

He received supportive hemodialysis, he showed improvement, patients urine output was 1 cc/kg/hour , his lab investigations were glomerular filtration rate to 6.9 mL/min/L and creatinine 9.5 mg/dL.

DISCUSSION

The role of hepatitis C in acute liver failure is still controversial. Based on study by Chu CM et al. 40 to 60% of patients with ALF suspected due to viral infections had negative serology for viral markers being classified as non A non B virus (NANB).[3]

The patient received N-acetylsisteine as one of drug therapy. According to placebo-controlled trial, 173 patients with acute liver failure due to other than acetaminophen toxicity were found significantly higher transplant-free survival in patients randomized to N-acetylsisteine (initial loading dose 150 mg/kg per hour over one hour followed by 12.5 mg/kg per hour for four hours, then continuous infusions of 6.25 mg/kg per hour for the remaining 67 hours). The benefit appeared to be confined to patients with early stage hepatic encephalopathy.[4]

Our patient received supportive hemodialysis based on cohort study compared dialysis versus non dialysis in patients with AKI. Dialysis was associated with increased survivalrate when initiated in patients with AKI who have a more elevated creatinine level with a 20% greater survival benefit from each dialysis for each 1-mg/dl increase in serum creatinine concentration.[5]

CONCLUSION

Determining the etiology of acute liver failure requires a combination of history taking, laboratory tests, and imaging studies. Because patients may decompensate rapidly, the initial evaluation should be broad, even in patients with a presumed cause for their acute liver failure. A broad evaluation is required to identify a cause of the acute liver failure and holistic management should be done.

1. Lee WM, Squires RH, Nyberg SL, Doo E, Hoofnagle JH. Acute Liver Failure: Summary of a Workshop NIH Public Access. Hepatology [Internet]. 2008;47(4):1401-15. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3381946/pdf/nihms224875.pdf
2. Farci P, Alter HJ, Shimoda A, Govindarajan S, Cheung LC, Melpolder JC, et al. Hepatitis C virus-associated fulminant hepatic failure. N Engl J Med. 1996;
3. Chu CM, Yeh CT, Liaw YF. Fulminant hepatic failure in acute hepatitis C: Increased risk in chronic carriers of hepatitis B virus. Gut. 1999;
4. Lee WM, Hynan LS, Rossaro L, Fontana RJ, Stravitz RT, Larson AM, et al. Intravenous N-Acetylcysteine Improves Transplant-Free Survival in Early Stage Non-Acetaminophen Acute Liver Failure. Gastroenterology. 2009;
5. Wilson FP, Yang W, Machado CA, Mariani LH, Borovskiy Y, Berns JS, et al. Dialysis versus nondialysis in patients with AKI: A propensity-matched cohort study. Clin J Am Soc Nephrol. 2014;9(4):673–81.

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16.

dr. Muhammad Ariful Basyar

A 28 Years Old Woman P2A0 post Caesarean Section ec Fetal Distress, Gastric Varices ec Non Cirrhotic Portal Hypertension ec Splenic Vein Stenosis

A 28 Years Old Woman P2A0 post Caesarean Section ec Fetal Distress, Gastric Varicesec Non Cirrhotic Portal Hypertension ec Splenic Vein Stenosis

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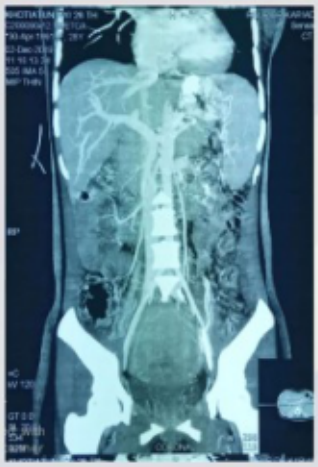
BACKGROUND

Non-cirrhotic portal hypertension is a portal hypertension without cirrhosis, it happen in 10% of patients with portal hypertension. Most common complication of NCPH are oesophagealvarices and gastric varices which also most common cause of death. It is difficult to diagnose because of the low prevalence and many clinical manifestations, commonly found are oesophagealvarices, gastric varices, splenomegaly, and anaemia. In ultrasound and liver biopsy the result is normal. The therapy for NCPH is beta-blocker to lower portal tension, endoscopic therapy for oesophagealvarices, and surgery.

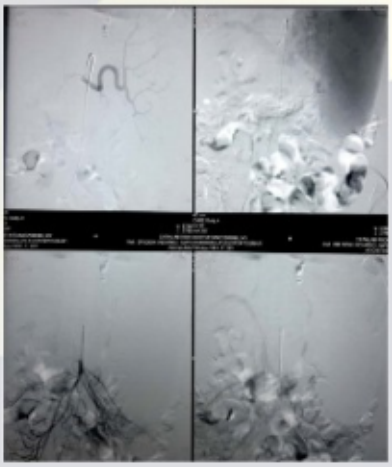
CASE DESCRIPTION

We show a case about 28 years old woman with history of two times pregnancy resulting with fetal distress. She also had gastric varices from non-cirrhotic portal hypertension. Patient came to the clinic because of the vomiting of blood and black stool within pregnancy and resulted in anaemia and thrombo-cytopenia. From physical examination, splenomegaly was found. From the gastroscopy, isolated gastric varices was found. From angioportal MSCT, thrombus of portal vein, hepatic vein, and splenic vein enlargement were not found. From spleno-portography splenic vein stenosis at the level of spleen hillus was found.

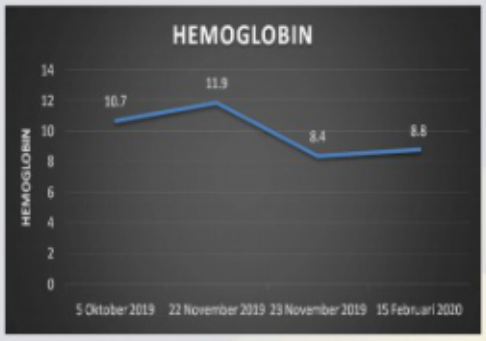
GASTROSCOPY



MSCT ANGIOPORTAL



SPLENOPORTOGRAPHY



DISCUSSION

We found that the cause of multiple pregnancy with fetal distress was anaemia from vomiting blood and black stool caused by gastric varices. From gastric varices we found the main problem was the splenic vein stenosis at the level of spleen hillus. We planned splenectomy for the patient so the patient can get normal pregnancy.

CONCLUSION

Non-cirrhotic portal hypertension is a portal hypertension without cirrhosis, it happen in 10% of patients with portal hypertension.In this case, 28 years old woman with history of two times pregnancy resulting with fetal distress from splenoportography splenic vein stenosis at the level of spleen hillus was found. We planned splenectomy for the patient so the patient can get normal pregnancy.

Daftar Peserta
Lomba Poster Ilmiah SGU 2020

17.

dr. Candra Christian Soekamto

Case Report :
30 Year Old Male Present
with Idiopathic Non Cirrhotic Portal Hypertension

CASE REPORT

30 Year Old Male Present with Idiopathic Non Cirrhotic Portal Hypertension

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Introduction

Idiopathic non cirrhothic portal hypertension (INCPH) is a hepatic presinusoidal cause of portal hypertension with unknown causes, which characterized by the features of portal hypertension and spenomegaly [2]. Even tough this disease has wordwide distribution, it is more likey happened in Asia. It is usually happened in low socioeconomically people, which usually live in low hygiene and living standarts [4]. This disease were usually characterized with clinical signs of portal hypertension and some histological findings. There is still no spesific guideline to treat INCPH [5]. But some researcher recommend to use the guideline that used to treat portal hypertension for this disease. The outcome of this disease is diverse in some journals [4].

Case Illustration :

A 30 year old male came to Emergency Department with hematemesis and melena. The patient had already three times bloody vomiting before came to the hospital. Each hematemesis volume was more or less 200 cc. Patient also had black stool since three days before came to hospital, each volume was more or less 150 cc. The patient also feels weak since he got the symptoms.

The patient had the same symptoms three years ago. The patient had no history of hepatitis, alcohol abuse, drug abuse, HIV, and hypertension. He is the only member of the family who has this disease. The patient works as a small food vendors and lived in a densely populated area with low hygiene.

From the physical examination, the patient looked weak, completely aware. He had no breathing difficulties, the blood pressure is within normal range, and had no fever. His conjuctiva looked pale and his sclera looked icteric. From the liver examination, there were no enlargement or pain in that area. But, we found splenomegaly as large as Hackett 2.

The laboratory examination showed the Haemaglobin level of 6.7 g/dL, the liver function test were increased (SGPT : 40 U/L, SGOT 77 U/L), The total protein level was in normal limit (6.1 g/dL), Albumin level was in normal range (Albumin level : 4 g/dL). The Globulin was slightly decreased with 2.1 g/dL The serologic test for hepatitis B, C, HIV were found negative. The ANA test were found increased (52.23 AU/ml).

Ultrasonography Imaging:

Fig. 1. Ultrasonography Imaging showed only non spesific splenomegaly, where the other organs seemed normal.

Upper Endoscopic Examination

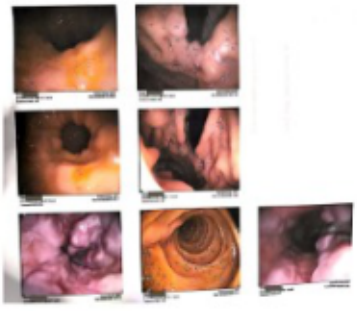

Fig 2. Upper Endoscopic examination at the third day since admission showed esophageal varices in grade II and gastropati portal hypertension

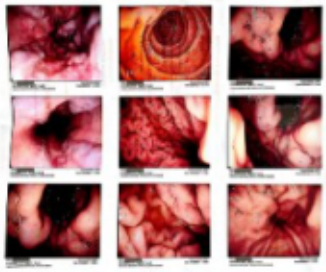

Fig 3. Upper Endoscopic examination done two weeks after admission showed esophageal varices grade II, varices at the fundus, and gastropati portal hypertension

The patient were diagnosed with Idiopathic Portal Hypertension. He was treated with Aminofusin infusion, Esomeprazole injection 2x40 mg, Metimazole sodium injection 3x1 gr, granisenron injection 3x1 gr, Vitamin K injection 3x500 mg, tranexamid acid injection 3x500 mg, 2 bags of PRC transfusion each day until Haemoglobin level >9.

The patient were discharged from the hospital at the fifth day of admission. He was given carvedilol 2x6.25 mg for the take home medicine. We educated the patient to take the medicine in daily basis and go to the Internal Medicine Clinic for the further follow up.

Discussion :

Idiopathic non-cirrhotic portal hypertension is a rare disease which characterized with intrahepatic portal hypertension, without any sign of cirrhosis, or other causes of liver disease and splanchic vein thrombosis [4]. INCPH has a worldwide distribution, but it happened more often in Asia[1]. The etiology of this disease is still unkown [4].

Patient with INCPH usually present with signs and symtomps associated with complications of portal hypertension.The liver enzymes usually is in normal range or can be slightly abnormal [2].

The ultrasonography examination might show nodularity in the liver surface and a thickened portal venous wall. Computed tomography and magnetic resonance imaging can show some signs of portal hypertension, extrahepatic portal vein thrombosis, intrahepatic portal abnormalities, nodular liver contour, and hypertrophy of the caudate lobe with atrophy of segment IV [2].

There is no clinical or laboratory examination that are spesific for INCPH. The diagnosis should be made after excluding other causes of portal hypertension. This should include a deteailed medical history and physical examination. Laboratory test should be done to rule out chronic viral hepatitis B and/or C, non alcoholic or alcoholic steatohepatitis, autoimmune hepatitis, hereditary hemochromatosis, Wilson's disease, and primary biliary cirrhosis [3]. Histology findings in the liver biospy are not spesific and very heterogenous [5].

The treatment is focused on managing the portal hypertension and its related complications, especially variceal bleeding [1]. Prophylaxis of variceal bleeding consists of the use of non-selective beta blockers, endoscopic variceal ligation, or TIPS in some selected patients [2].

The 5 years prognosis of this disease is nearly 100% [5]. But some studies show some different prognosis of INCPH, range from 56-82% in a 10 year survival [1]. The presence of acites, concominat severe disorders and malignancy were identified as a poor prognostic factor[4].

Conclusion :

INCPH is a rare disorder which consisting of intrahepatic portal hypertension with no evidence of intrinsic liver disease and/or splanchnic vein thrombosis. This disease is more often happened in Asian people with varian age of onset. The sign and symptomps are associated with complications of portal hypertension. The diagnosis of INCPH is a diagnosis of exclusion, which it shoud include a detailed medical history, physical examination, liver imaging, and laboratory examination. The treatment is mainly focused on the complications of portal hypertension. The prognosis of five years survival is nearly 100% but for the ten years survival it range from 56-82%

Limitation :

We were unable to did liver biospy due to lack of facilities. But we can still exclude the other differential diagnosis before we made the diagnosis.

References:
1. Hernandez-Gea, Virginia, Anna Baiges, Fanny Turon, and Juan Carlos Garcia-Pagan. 2018. Idiopathic Portal Hypertension. Hepatology. 2413-2423.
2. Lee, Hwajeong, Aeeb Ur Rehman, M. Isabel Fiel. 2015. Idiopathic Noncirrhotic Portal Hypertension : An Appraisal. Journal of Pathology and Transmisional Medicine. 17-22.
3. Riggio, Olivero, Stefani Gioia, Ilaria Pentassuglio, Valerie Nicoletti, Michele Valente, Giulia d'Amati. 2016. Idiopathic Noncirrhotic Portal Hypertension : Current Perspectives. Hepatic Medicine : Evidence and Research. 81-87.
4. Schouten, Jeoffrey NL, Joanne Verheij, and Susana Seijo. 2015. Idiopathic Non-cirrhotic Portal Hypertension : A Review. Orphanet Journal of Rare Diseases. 1-8.
5. Siramolpiwat, Sith, Susana Seijo. 2016. Idiopathic Non-cirrhotic Portal Hypertension. Journal of Rare Disease and Treatment. 10-16.

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18.

dr. Ayu Nursantisuryani Jahya

Challenges in Diagnosis and Treatment of Peritonitis Related Tuberculous Appendicitis with Additional Burdens Faced Amid COVID-19 Pandemic: A Case Report

Challenges in Diagnosis and Treatment of Peritonitis Related Tuberculous Appendicitis with Additional Burdens Faced Amid COVID-19 Pandemic: A Case Report

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INTRODUCTION

Tuberculosis remains as global burden for decades. It has become even more apparent in developing countries like Indonesia. In 2014 alone, prevalence of tuberculosis had reached 647 per 100.000 people, which affect both immunocompromised as well as immunocompetent population.[1,2] Out of total TB cases, up to 20% cases are extra pulmonary TB, among which, abdominal TB has contributed in 11% of its incidence.[3] However due to its vague nature, the possibility of tuberculous abdominal is often overlooked. Diagnosis and treatment of this disease had become even more challenging during COVID-19 pandemic.

In this article, we present a case of tuberculous appendicitis induced peritonitis admitted to our center, a type C hospital, during COVID-19 pandemic. We would like to emphasize on the challenges and additional burdens we found, given this trying time.

CASE PRESENTATION

July 2nd, 2020

- A 12-year-old girl (BMI: 15 kg/m²) came to our surgery department with chief complaint of : **abdominal pain** that had been going on for more than 2 weeks.
- **Laboratory examination**: total leukocyte count 14.9 x 10³/L, hemoglobin 7.4 g/dl
- **Abdominal ultrasonography** showed a lot of free liquid in peritoneal cavity, McBurney area was prominent
- **Diagnosis** : peritonitis et causa perforated appendicitis and anemia hypochromic microcytic

July 4th, 2020

- After blood transfusion consisting of PRC of 250cc/day was initiated, complete blood count showed that hemoglobin level was **Hb 8.1 g/dl**

July 5th 2020

- **Surgery** was performed. We found **adhesion of the gut lumen.** Manual release was performed to get better view with surgery tools and warm normal saline solution (38-39 degree Celsius). On duration of surgery, we also found multiple granulomatous on colon surface, denoting possibility of tuberculosis infection.
- **Chest X-Ray** post surgery showed presence of air below left and right diaphragms **(Figure 1)**, signified of pneumoperitoneum.
- **Pathology** results of patient's resected appendix specimen: multinucleated giant cell Datia Langhans -> peri-appendicular infiltrate with tuberculosis infection

July 16th, 2020

- Patient came to the emergency department with chief complaint of bloody diarrhea, vital signs -> **shock**.
- **Laboratory examination** were performed with results of hemoglobin level was 4.6 g/dl
- Higher care center during COVID-19 : require swab PCR and rapid test result -> unlikely to refer patient
- Unfortunately, patient's condition deteriorated on the evening.

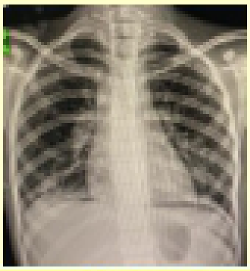

Figure 1. Patient's chest X-ray showed signs of pneumopreritoneum

DISCUSSION

It is very unlikely to make pre-operative diagnosis of tuberculous appendicitis. In our case, the diagnosis was made based on histopathological finding. Mycobacterial culture remains as the gold standard test for diagnosing tuberculosis (TB)[4] but it is very time consuming. Below, we listed several distinctive findings we had obtained in regard to the making of diagnosis. :

- **Anamnesis and clinical presentation:**
  - History related to prior TB infection, close contact with TB confirmed patients were *denied* + relatively clear lungs on chest radiography -> primary tubercular appendicitis.
  - Recurrent abdominal pain for more than 2 weeks and becoming even more severe by days, vomiting, diarrhea, trouble in passing gas, and constipation -> suggestive common clinical presentation of chronic type tuberculous appendicitis, which happen most frequently.[5]
  - Abdominal distention, fever, weight loss[1] -> ongoing tuberculous infection.
- **Supportive examination:**
  - Abdominal USG: free fluid in intraperitoneal cavity + prominent McBurney -> perforated appendix[6].
- **Intraoperative finding:**
  - Adhesion on gut lumen, few granulomatous studded on colon -> typical of tuberculosis infection

As difficult as it was in finalizing the diagnosis, patient's treatment has been made even more challenging amid this unprecedented situation. Below were several problems we encountered in patient's management:

- **Pre-surgery:**
  - Patients' fear over novel virus spiraling around the hospital -> Patients coming to hospital only after their conditions were not favorable.
  - Case fatality rate of TB infection increasing up to 50% due to: old age, delayed initiation of therapy, other comorbidities, and early complication (peritonitis) that had been going over the course of the disease.[11]
- **During surgery:**
  - Easily bleeding granulomatous section of appendix -> very delicate maneuver -> Unavailability of intraoperative blood transfusion.
  - Blood shortage -> people were discouraged to go out, particularly to health care facilities to donate. In addition to, stigma regarding healthcare workers carry higher risk of transmission.[12]
  - Personal protective equipment usage during pandemic -> effortful adjustment, limitation on sights as well as surgeons' mobility.
  - Medical staff involved in the surgery should be reduced to the minimum number possible to avoid exposure.[13,14]
  - Creation of intraoperative artificial pneumoperitoneum during laparotomy will reduce lung volume, increase airway pressure, CO2 retention and decrease lung. Therefore, the risk of perioperative COVID-19 infection is considered high.[13]
- **Post-surgery:**
  - Pneumoperitoneum on postoperative chest radiograph with no related complaints -> observation as it often a natural finding following laparotomy.[15,16]
  - No specific guideline on anti-tuberculosis treatment on abdominal TB[3]. Delayed of treatment may result in several complications, such as ileo-cutaneous fistula.[17]
  - Patient's referral on re-admission was turned down owing to a lot of adjustment made by healthcare facilities during pandemic in an effort to restrict cross transmission. One of which is, to attach patient's rapid test and nasal-swab PCR result (2-3 days completion) , hence patients' referral was unlikely to be done as soon as possible.

CONCLUSIONS

Despite its rare occurrence, tuberculosis of appendix should always be considered, moreover in patients residing in endemic area with complaint of chronic abdominal pain, as well as signs of tuberculous infection such as night sweats and weight loss. To date, histopathological finding remains reliable and effective for diagnosis. Surgery should be prioritized in our patient regarding the disadvantageous signs of perforation.

During COVID-19, many unfamiliar procedures need to be routinely carried out to prevent transmission of disease. Blood shortage, delayed referral, patient's reluctance to go to the hospital when they can still bear the pain had cost greater risk of unfavorable result in our patient. This novel state required healthcare providers to be very vigilant, as well as efficient, and more adaptable than ever.

REFERENCES

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19.

dr. Risa Ardiani

Case Report:
Recurrent Non-Variceal
Upper Gastrointestinal Bleeding

Case Report: Recurrent Non Variceal Upper Gastrointestinal Bleeding

dr.Risa Ardiani, dr. Didit Raditya Sp.PD

Introduction

Gastrointestinal Bleeding (GIB) is one of the most common gastrointestinal emergencies, with an average mortality rate of 10%.The prevalence of GIB in Indonesian's population is still unknown, The high mortality rate is very much influenced by the primary illness or condition resulting in bleeding. Peptic ulcer bleeding (PUB) is the most common cause of UGIB. H. pylori infection is a major factor in the development of ulcers, both duodenal and gastric ulcers. The data were taken from studies on western countries populations. Although they may have a list with similar order, it is estimated that in developing countries, H.pylori plays a more significant role

Endoscopy is an examination's procedure that used to view the abnormal finding in gastrointestinal mucosa or lumen GIT, which is a relatively safe procedure to determine causal of GIB.

Helminths are widespread intestinal parasites. These parasites can be divided into three common groups: nematodes, cestodes, trematodes. Helminths may lead to life-threatening clinic conditions such as acute abdomen, gastrointestinal perforation, intestinal obstruction, and hemorrhages. Acute gastrointestinal bleeding due to hookworm infections was rarely described previously. However, in developing countries especially in the tropics, worm infection should be considered an important cause of obscure acute gastrointestinal bleeding. Hookworm infection is a treatable disease and results in complete recover.

Case Presentation

A 57-year-old female was admitted to hospital with a chief compliment of melena. Since 7 days prior to admission the patient complained of excreting black tarry stools 2-3 times a day, amounting to approximately 1 glass a day. The patient also complained of epigastric pain, generalized weakness, dizziness and paleness.

Couple months before, patient had history of anaemia because of black stools and received 7 packs of PRC transfusion.
No history of fever, no intake of rheumatic drugs, painkillers, nor traditional herbs.

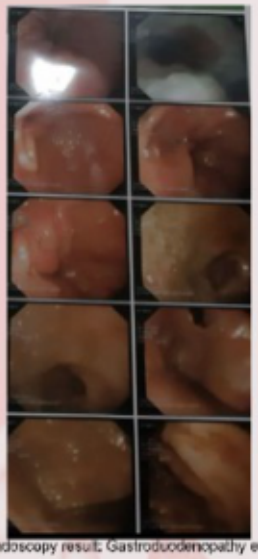
Physical examination during admission revealed the patient to be moderately ill, hemodynamic signs were stable. The patient's skin and conjunctiva were pale. Abdominal examination revealed epigastic pain. No stigmata of liver chirosis was found.

Laboratory Results

	First Day	After Transfusion
Hemoglobin	4,4 g/dl	9,6 g/dl
White blood cell count	6.360 / ul,	7.610 / ul,
Red blood cellcount	1,91 million / ul	3,6 million / ul
Hematocryte	17,79 vol %,	31,9 vol %,
Platelet count	377,000 / ul.	435,000 / ul.

Table 1. Labs Value

Picture 1. Normal Abdominal Ultrasound.
Imaged liver, spleen and pancreas have a normal appearance.
No focal liver lesion. Gallbladder is normal with no gallstones demonstrated.
No intra- or extra-hepatic duct dilatation



Picture 2. Endoscopy result: Gastroduodenopathy erosif, Helminthiasis

The patient was given PRC transfusion, omeprazole injection, tranexamic acid injection and rebamipide. After 1250 cc of packed red cell transfusion, Endoscopy revealed Gastroduodenopathy erosive and helminthiasis. Biopsy sample was also taken from duodenum. The gastroenterologist recommended the administration of mebendazole 500 mg orally once. The hemoglobin level increase from 4.4 to 9.6. the patient was released and required to come for regular visits, and then found out that result of endoscopic mucosal biopsy was suspect *H. pylori* infection.

Discussion

The patient was 57 old female with recurrent gastrointestinal bleeding. From EGD procedure was found that the cause of melena are Gastroduodenopathy erosive and helminthiasis. An appropriate early evaluation and resuscitation are important measures that should be carried out for patients with UGIB, especially for those who present with hematemesis, massive hematochezia, melena or progressive anemia. Resuscitation measures include administration of intravenous fluid, oxygen supplementation, correction of severe coagulopathy and blood transfusion as needed. When endoscopy will be delayed and can not be performed, an intravenous PPI therapy is recommended to reduce further bleeding.

H. pylori infection is a major factor in the development of ulcers, both duodenal and gastric ulcers.*H. pylori* test is recommended in all patients with peptic ulcer bleeding. The test is subsequently followed with eradication therapy for all patients who have positive results. The triple therapy for *H. pylori* eradication has a successful rate of 80% or even 90% in peptic-ulcer patients without any significant side effects and has a minimal effect on antibiotic resistance.

Literature also mentions that Hookworms may cause clinic conditions such as gastrointestinal bleeding, and severe anemia. According to CDC, Hookworm infection is treated with albendazole 400 mg orally once, mebendazole 100 mg orally twice a day for 3 days or 500 mg orally once, or pyrantel pamoate 11 mg/kg (up to a maximum of 1 g) orally daily for 3 days

Conclusion

Endoscopy has important role for identification of the source of GIB. Helminths may lead to life-threatening clinic conditions such as acute abdomen, perforation, obstruction, and gastrointestinal hemorrhages. In developing country, it is very important to consider and remember helminths in differential diagnoses during daily routines

Reference

Simadibrata, et al. Konsensus Nasional Penatalaksanaan Dispepsia dan Infeksi Helicobacter pylori. 2014
Simadibrata, et al. Konsensus Nasional Perdarahan Saluran Cerna Atas Non Variseal. 2012
Uysal E and Dokur M. The Helminths Causing Surgical or Endoscopic Abdominal Intervention: A Review Article. Iranian Jornal Parasitol. 2017
Nolecina S and Kombe E. Risk factors for mortality among patients admitted with upper gastrointestinal bleeding at a tertiary hospital: a prospective cohort study.BMC GASTROENTEROLOGY. 2017
Sugiarta GRM , Sumandi IK.The endoscopy profile of patients with Gastrointestinal Bleeding (GIB) at Klungkung Regional General Hospital, Bali, Indonesia during the 2014-2018 period! Intisari Sains Medis 2020
Xia Tan, et al. Hookworm Infection Caused Acute Intestinal Bleeding Diagnosed by Capsule: A Case Report and Literature Review. Korean J Parasitol. 2017 Aug; 55(4): 417-420
www.cdc.gov/parasites/hookworm/

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20.

dr. Fauzi Satria

Administration of Tranexamic Acid and Vitamin K in Recurrent Upper Gastrointestinal Bleeding Case: Does It Reduce Rebleeding and The Need for Blood Transfusion?

Administration of Tranexamic Acid and Vitamin K in Recurrent Upper Gastrointestinal Bleeding Case: Does It Reduce Rebleeding and The Need for Blood Transfusion?

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Background

The use of Tranexamic Acid (TXA) and Vitamin K (Vit K) in Upper Gastrointestinal Bleeding (UGIB) is still controversial. Some studies claim to reduce mortality rates while some claim to be no. Despite all that, TXA and Vit K is readily aThe use of Tranexamic Acid (TXA) and Vitamin K (Vit K) in Upper Gastrointestinal Bleeding (UGIB) is still controversial. Some studies claim to reduce mortality rates while some claim to be no. Despite all that, TXA and Vit K is readily available drug, widely used in resource poor areas.

Case Description

A 65-year-old man came to the ER of the PMC Hospital with complaints of heartburn since 3 days ago and had black stools since 1 month ago. While in the ER, the patient vomited blood once ± ¾ glass. The patient appears pale and limp. Previously, the patient routinely took uric acid medication but did not remember the name of the medication. The patient was treated in 2015 and 2016 with the same complaint. On physical examination, the conciousness is compos mentis, BP 80/43 mmHg, RR 20x/i, P 108x/i, T 36.8^{0}C, VAS 6, pale inferior conjunctival palpebra, epigastric tenderness in abdomen, four extremities acral are cold and CRT <2". Blood test shows Hb level was 8.9 g/dl. Patients were given loading RL 500cc and NaCl 500cc, Pantoprazole inj. 2x40mg then 40mg/5 hours, TXA Inj. 3x500mg, Sucralfate syr 3xCth2, Vit K 3x1 tab. Twelve hours later, the Hb level was 8.6 g/dl. On the second day of treatment, the patient vomited blood again ± half a glass. The second, third and fourth day of treatment there was a decrease in Hb levels, respectively 8.4 g/dl, 8.2 gr/dl and 7.9 gr/dl. Then the patient was given a blood transfusion of 1 unit /day for 2 unit. Post transfusion on the fifth and sixth day of treatment, the Hb level increased in the numbers 9.2 g/dl and 10.9 g/dl. Clinical symptoms began to improve on the fifth day. The patient was discharged on the seventh day of hospitalization.

Discussion

Coagulation occurs rapidly at the site of a damaged blood vessel forming a stable fibrin blood clot in normal haemostasis. However, Plasmin as fibrinolytic enzymes in the blood can impair clot stability and worsen bleeding. TXA mechanism of action is inhibits plasmin and enhance the ability to form stable blood clots. Vitamin K administration is also used as a supplementary intervention in acute bleeding. Vitamin K helps activate coagulation factors and responsible for the production of factors II, VII, IX, and X. Nutbeam T conclude that use of TXA may lead to reduction in early rebleeding, repeated endoscopic procedure, and the number of blood transfusions required.

Patient's Serial Blood Test

Parameter / Day	Hb (g/dl)	Ht (%)	Leu (10^3/µl)	Trom (10^3/µl)
1 (a)	8,9	26,6	14,1	369
1 (b)	8,6	25,1	12,7	316
2	8,4	24,9	9,4	336
3	8,2	24,2	8,2	324
4	7,9	23,3	7,6	289
5	9,2	27,6	7,6	285
6	10,9	32,2	7,7	268

Conclusion

Early administration both of TXA and Vit K in this case could possibly reduce the duration and amount of bleeding at presentation and the risk of re-bleeding. This could reduce mortality and the need for blood transfusion.

Reference

1. Nutbeam T. In adult patients presenting as emergencies with upper gastrointestinal bleeding, does tranexamic acid decrease mortality?. African Journal of Emergency Medicine. 2015; 5: 85–92
2. Roberst I, Coats T, Edwards P *et al*.HALT-IT - tranexamic acid for the treatment of gastrointestinal bleeding: study protocol for a randomised controlled trial. Trials. 2014; 15:450
3. Marti-Carvajal AJ, Sola I. Vitamin K for upper gastrointestinal bleeding in people with acute or chronic liver diseases (Review). Cochrane Database of Systematic Reviews. 2015; 6: 1-2
4. Aldrich SM, Regal RE. Routine Use of Vitamin K in the Treatment of Cirrhosis-Related Coagulopathy: Is it A-O-K? Maybe Not, We Say. P&T. 2019; 44(3): 131-136

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21.

dr. Boby Pratama Putra

Evidence of Microalbuminuria and Estimated Glomerular Filtration Rate Decline as Chronic Kidney Disease Risks in Non-alcoholic Fatty Liver Disease Patients: Systematic Review and Meta-Analysis of Cohort Studies

Evidence of Microalbuminuria and Estimated Glomerular Filtration Rate Decline as Chronic Kidney Disease Risks in Non-alcoholic Fatty Liver Disease Patients: Systematic Review and Meta-Analysis of Cohort Studies

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INTRODUCTION

Non-alcoholic fatty liver disease (NAFLD) has been the most prevalent chronic liver disease that may lead to cirrhosis and hepatocellular carcinoma. Recent evidences showed association between NAFLD and extrahepatic manifestations include chronic kidney disease (CKD) although the result is still inconsistent. This study aims to measure the association of microalbuminuria and estimated glomerular filtration rate (eGFR) decline as CKD risks in NAFLD patients.

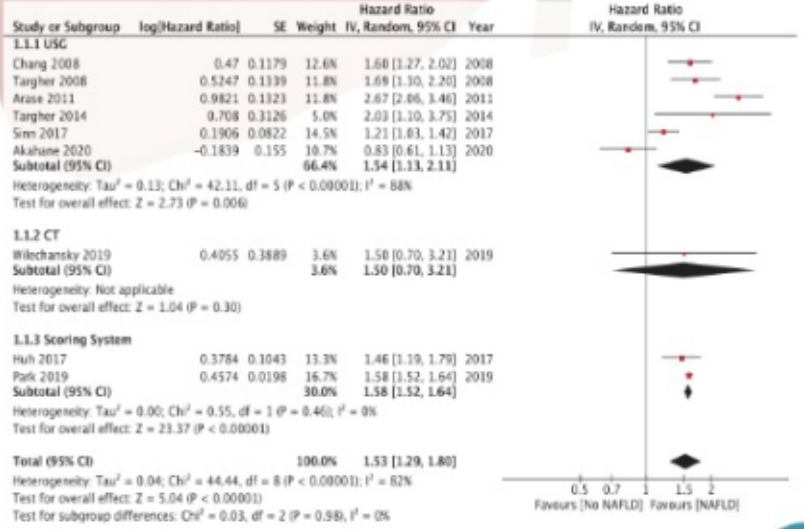
METHODS

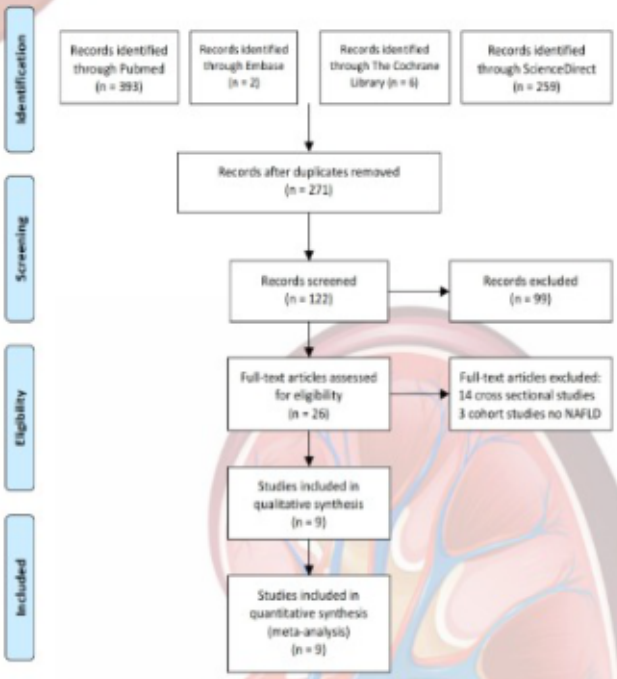
Comprehensive searching using predefined queries was done through online databases Pubmed, EMBASE, ScienceDirect, and The Cochrane Library for all relevant literature until July 2020. We included all cohort studies met inclusion criteria of NAFLD patients diagnosed by ultrasonography (USG), commutated tomography (CT), or fatty liver index (FLI) which reports microalbuminuria and eGFR decline below 60 ml/min/1.73m^2. Bias risk was assessed by The Newcastle-Ottawa Scale for cohort studies. Analysis of this study was performed using Review Manager (RevMan) version 5.3 to provide hazard ratio (HR) with 95% confidence interval (CI) using random effect heterogeneity test.

RESULTS

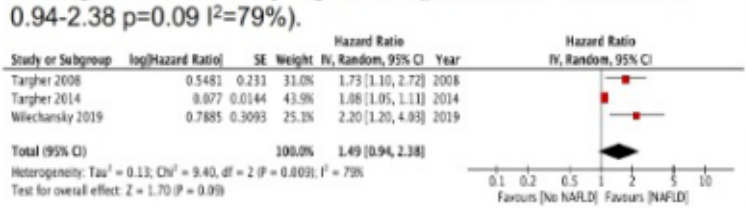
We included 9 cohort studies met our criteria.

Analysis of 6 NAFLD cohort studies diagnosed by USG is significantly associated with eGFR decline (pooled HR=1.54 95%CI 1.13-2.11 p=0.006 I^2=88%), while overall analysis combined with other diagnostic modalities showed significant association between NAFLD and eGFR decline (pooled HR=1.53 95%CI 1.29-1.80 p<0.00001 I^2=82%).

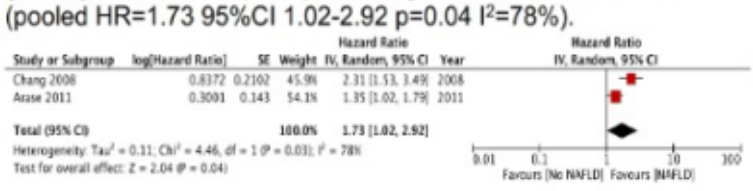




Microalbuminuria risk is increased in NAFLD patients although not statistically significant (pooled HR=1.49 95%CI 0.94-2.38 p=0.09 I^2=79%).



Surprisingly, NAFLD patients whose increased gamma-glutamyltransferase (GGT) has higher eGFR decline risk (pooled HR=1.73 95%CI 1.02-2.92 p=0.04 I^2=78%).



CONCLUSION

Microalbuminuria and eGFR decline has association in NAFLD patients as risks for CKD development. However, further studies are still needed to establish causality.

REFERENCES

Akahane, T. et al., 2020. Association between Non-Alcoholic Fatty Liver Disease and Chronic Kidney Disease: A Cross-Sectional Study. *Journal of Clinical Medicine*, 9(6), p.1635.
Arase, Y. et al., 2011. The development of chronic kidney disease in Japanese patients with non-alcoholic fatty liver disease. *Internal Medicine*, 50(10), pp.1081–1087.
Chang, Y. et al., 2008. Nonalcoholic fatty liver disease predicts chronic kidney disease in nonhypertensive and nondiabetic Korean men. *Metabolism: Clinical and Experimental*, 57(4), pp.569–576.
Huh, J.H. et al., 2017. The fatty liver index as a predictor of incident chronic kidney disease in a 10-year prospective cohort study. *PLoS ONE*, 12(7), pp.1–13.
Park, H. et al., 2019. Nonalcoholic fatty liver disease increases risk of incident advanced chronic kidney disease: a propensity-matched cohort study. *Journal of Internal Medicine*, 286(6), pp.711–722.
Sinn, D.H. et al., 2017. Development of chronic kidney disease in patients with non-alcoholic fatty liver disease: A cohort study. *Journal of Hepatology*, 67(6), pp.1274–1280.
Targher, G. et al., 2008. Increased risk of CKD among type 2 diabetics with nonalcoholic fatty liver disease. *Journal of the American Society of Nephrology*, 19(8), pp.1564–1570.
Targher, G. et al., 2014. Nonalcoholic fatty liver disease is independently associated with an increased incidence of chronic kidney disease in patients with type 1 diabetes. *Diabetes Care*, 37(6), pp.1729–1736.
Wilechansky, R.M. et al., 2019. Relations of liver fat with prevalent and incident chronic kidney disease in the Framingham Heart Study: A secondary analysis. *Liver International*, 39(8), pp.1535–1544.

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22.

dr. Jona August

**Amoeba Liver Absess with Lung Empiema :
A Case Report**

RUMAH SAKIT PELNI

AMOEBIC LIVER ABSCESS WITH THORACIC EMPYEMA A CASE REPORT

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*General Practisioner in Pelni Hospital Jakarta
**Gastroenterohepatolgist in Pelni Hospital

BACKGROUND

About 10% of the world's population is infected with Entamoeba, and infection from Entamoeba Histolityca is the third cause of death from parasite infection. Amoebic liver abscess is the most common extraintestinal infection of E. histolityca. In general, the main complaint is a dull right upper abdominal pain accompanied by fever. Supporting examinations that can be done are amoebic serology test laboratory, blood culture, aspiration fluid culture and radiological imaging (USG and CT Scan). The most common complication of amoebic liver abscess is rupture through the diaphragm causing amoebic pulmonary empyema (20-30%).

Management of amobeic liver abscess is:
- Liver abscess 1-5 cm in size: medical therapy if a negative response is done by aspiration
- Liver abscess size 5-8 cm: recurrent abscess aspiration therapy
- Liver abscess> 8 cm in size: percutaneous drainage.

CASE DESCRIPTION

A 45 year old man presented with a complaint of shortness of breath 1 week before being admitted to the hospital, shortness of breath accompanied by right chest pain and coughing. No fever, no coughing up blood, no weight loss, no defecation and bowel problems. Past disease history of pulmonary TB with OAT category I for 2 months. Blood pressure 90/50, pulse 134 beats per minute, breathing 30 times per minute, temperature 36.1. on physical examination of the chest, it was found that the lung sound decreased by 1/3 of the basal lung.
From the laboratory results obtained leukocytosis (29,300 / uL), negative smear results, ADA results (adenosine deaminase) 232.5U / l and antibody E. Histolytica OD unit 1.98 (negative <0.4; positive> 0.4), liver function, kidney function and value electrolytes within normal limits. Chest x-rays, plural right encapsulated effusion, bronchopenumonia, upper abdominal ultrasound results: 2.4x4.2 cm clear borderline cystic lesions, contrast upper abdominal mact results: cystic lesions of the right hepatic border were enlarged by contrast. Management therapy by installing WSD for drainage of plural effusions, administration of antibiotics, meropenem and metronidazole for 7 days and OAT category I continued.Monitoring at Pelni Hospital after administration of Meropenem and Metronidazole and the installation of WSD obtained abscess and empyema disappear.






CONCLUSION

One of the complications of amoebic liver abscess is pulmonary empyema in which the main complaint is shortness of breath and there is no complaint of right upper abdominal pain. Management with broad-spectrum antibiotic and metronidazole and WSD installation results in good outcomes.

REFRENCE

1.Andrade RM, Sharon LR .Amebiasis and Infection with Free Living Amebas. In : Harrison's Principles of Internal Medicine 19th Edition. Editors : Kasper DL, Hauser SL McGraw- Hill Company. 2015;1363-7
2.Julius., Abses Hati. Buku Ajar Ilmu Penyakit Hati. Edisi pertama. Editors : Sulaiman Ali, Akbar HN, Sagung Seto CV. 2012; 500-5
3.Nusi A., Abses Hati Amuba. Buku Ajar Ilmu Penyakit Dalam. Edisi enam. Jakarta : Balai Penerbitan FKUI; 2014: 1991-5

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23.

dr. Galih Prakasa Adhyatma

The Seroprevalence of Hepatitis C Positive in Donors Of Indonesian Red Cross Blood Bank Semarang, Central Java

THE SEROPREVALENCE OF HEPATITIS C POSITIVE IN DONORS OF INDONESIAN RED CROSS BLOOD BANK SEMARANG, CENTRAL JAVA

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BACKGROUND

The Asia-Pacific region has the highest prevalence of Hepatitis B (HBV) and Hepatitis C (HCV) infections in the world with 74% of lethal liver complications occurring in Asia. In 2012, Indonesia had a prevalence of 0,39% for Hepatitis C infections, according to a data taken from Unit Transfusi Darah Pusat. It is a target by World Health Organization (WHO) to reduce new viral hepatitis infections by 90% and deaths due to viral hepatitis by 65% by 2030.

METHODS

This was an observational descriptive study (September 2019 – February 2020). Data were obtained through patient's medical records from January 2009 to December 2019. Subjects who had been a donor in the Indonesian Red Cross Semarang, had an HCV-reactive screening result, and had their basic demographic data taken were included in the study.

RESULTS AND DISCUSSION

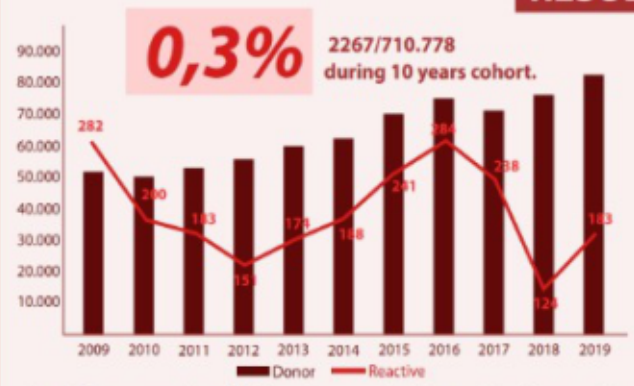

Figure 1. The seroprevalence of HCV-reactive among blood donors during 10 years cohort

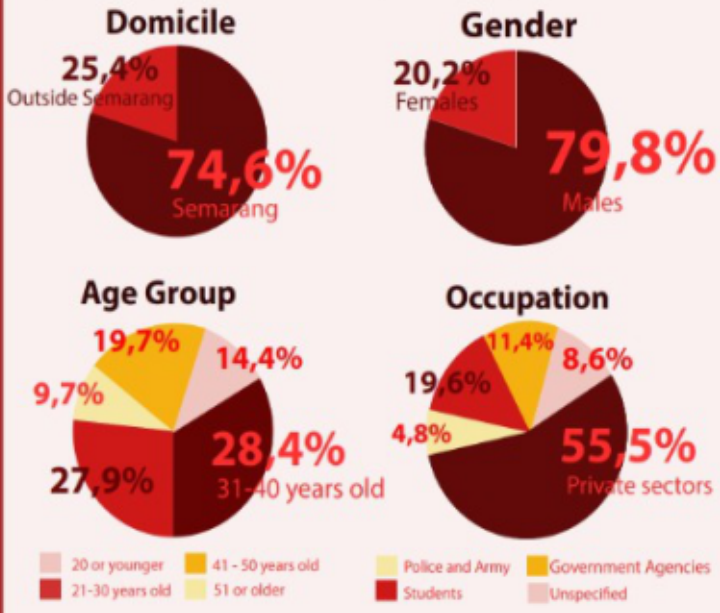

Figure 2. Demographic information of Blood Donors

The highest prevalence was found in 2009 (0.6%) with the lowest were in 2018 and 2019 (0.2%). It is in line with the data taken from Unit Transfusi Darah Pusat where Hepatitis C had a prevalence of 0,39% with the highest prevalence of reactivity in 2009 (0.59%).

In this study, the trend of prevalence showed an improvement but had not yet reached the target of WHO as previously stated. The lack of surveillance program, lack of education, and lack of accessibility to screening platforms were some of the possible contributing factors to this issue.

The prevalence of HCV-reactive was higher in the age group of 31 – 40 years old. In comparison with data obtained from Indonesian Ministry of Health in 2013 showed the highest prevalence of hepatitis infection in the age group of 45 – 54 years old and 65 – 74 years old, the age distribution in this study was relatively younger.

The prevalence gradually decreased with age. It might be caused by the decline in physical mobility, leading to a limited opportunity for the elderly to access screenings and examinations in the blood bank.

CONCLUSIONS

HCV infection among blood donors remains an important public health concern. It has been discovered that the trend of infection has decreased but has not yet reached the target. Greater efforts of management need to be implemented and maintained in order to achieve the target.

References

1) World Health Organization. Global Health Sector Strategy on Viral Hepatitis 2016-2021; Towards Ending Viral Hepatitis. WHO : 2016. 2) Kementerian Kesehatan Republik Indonesia. Infodatin : Situasi dan Analisis Hepatitis. Kemenkes RI : 2014.

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24.

dr. Dinda Saraswati Ratnaningsih, Sp.PD

Clinical Characteristics and Helicobacter pylori Infection in Chronic Kidney Disease Patients with Gastrointestinal Event

Clinical Characteristics and *Helicobacter pylori* Infection in Chronic Kidney Disease Patients with Gastrointestinal Event (Clinical Study in Kariadi General Hospital Semarang)

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Background

Gastrointestinal event (GI event) is one of the complications that occurs in patients with chronic kidney disease (CKD), with a variety of symptoms ranging from mild nausea-vomitus, to severe bleeding. The pathogenesis of gastrointestinal disorders in CKD patients is multifactorial; uremic toxin retention, chronic inflammation, iatrogenic and motility disorders. It is not yet known about clinical feature of GI events that occur in patients with CKD, endoscopic and histopathological decriptions of gastrointestinal lesions, and *H. pylori* infection.

Methods

This study was an analitical observational study with cross sectional approach. The samples were CKD patients aged 18 years or above who experienced GI events and underwent gastrointestinal endoscopy at dr. Kariadi General Hospital Semarang, both inpatient or outpatient during the period of January 2018-January 2020. Classification of the severity of CKD based on creatinine clearance (*Cockcroft-Gault*) is divided into stages 1 to 5. Endoscopic and histopathological imaging data are drawn from the conclusions of the examination. Analysis of finding correlation between the severity of CKD with several variables; type of GI event, endoscopic features and *H.pylori* infection.

Results

A total of 104 CKD patients, the majority of whom were inpatients with GI events had undergone gastrointestinal endoscopy, ages ranging from 22-87 years, mean age of 52.26 years, 54.8% male and 45.2% female, the majority are patients in stage 5 CKD (61.5%). Types of GI events are based on the highest order, namely; melena (56.7%), dyspepsia (25%), hematemesis (12.5%), abdominal pain (3.8%) and hematoschezia (1.9%). The features from gastrointestinal endoscopy were ulcers (38.5%), inflammation (29.8%), erosions (26.9%) and polyps (4,8%). The location of GI lesions mostly in the stomach 66.3%. The histopathological feature mostly of active chronic inflammation 78.8% and the incidence of *Helicobacter pylori* infection is 24.4%. The results of the analysis finding correlation between the severity of CKD with several variables; type of GI event (p= 0.18), endoscopic features (p= 0.75) and *H. pylori* infection (p= 0.073).

Conclusions

The majority of GI events in CKD occur in stage 5 CKD patients, with melena as the most common presenting symptom, ulcer was the most commonly detected lesion and stomach as the most commonly affected site. There are no correlations between the severity of CKD with types of GI event, endoscopic features and *H. pylori* infection.

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25.

dr. Muhammad Nadim R.P

Geographic Distribution and Clinical Characteristics of Hepatocellular Carcinoma Patients Etiology of Hepatitis B Viruses in Dr . Kariadi Hospital Semarang

GEOGRAPHIC DISTRIBUTION AND CLINICAL CHARACTERISTICS OF HEPATOCELLULAR CARCINOMA PATIENTS ETIOLOGY OF HEPATITIS B VIRUSES IN DR. KARIADI HOSPITAL SEMARANG

Muhammad Nadhim R .P,C Suharti, Hardian

BACKGROUND

HCC is 10-20% of all liver diseases in **Indonesia.** There is no previous study that shows patient's geographic distribution data of Hepatitis B virus etiology in Central Java.

This study **aims to analyze graphic distribution** and the correlation between **patient's place of origin with clinical characteristic** of HCC with Hepatitis B virus as etiology in **RSUP Dr Kariadi Semarang**

METHODS

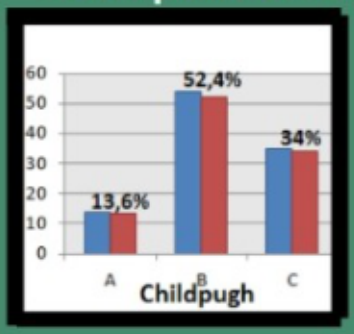
- **Retrospective study** through RSUP Dr Kariadi HCC patient's medical record in 2013-2015.
- **Analyzed variables:** distribution of patient's place of origin (urban/rural).
- **Clinical characteristic:** age, sex, severity: child-pugh score, BCLC staging, and AFP level.
- Processed with SPSS program, **significant value p<0,05**.

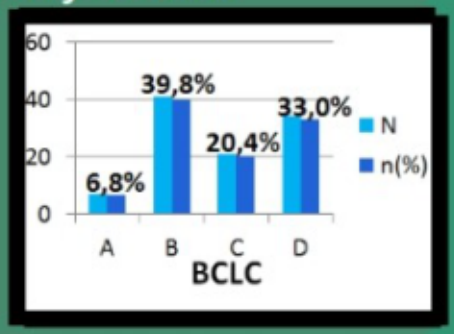
RESULTS

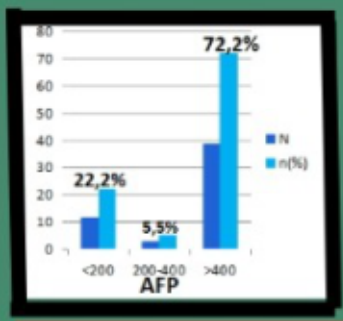
- **Distribution maps of most origin place of 103 HCC patient:**

Most place of origins of 103 HCC patients are Demak , Semarang, and Grobogan

- **Graphic Severity score:**







As seen from the graphic, most patiens who came to Kariadi Hospital were already in the advanced stage of Child Pugh B/C and BCLC stage C/D

CONCLUSION

- **3 Highest geographic distribution rate of HCC patients in RSDK:** Demak, Semarang, and Grobogan
- Clinical characteristics & severity were scattered in the area.There's no particular area that have specific clinical characteristics and severity.

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26.

dr. Muhammad Iqbal

Case Report of Decompensated Liver Cirrhosis with Alcohol Risk Factor: Diagnostic and Therapeutic Challenge in Primary Hospital

CASE REPORT OF DECOMPENSATED LIVER CIRRHOSIS WITH ALCOHOL RISK FACTOR : DIAGNOSTIC AND THERAPEUTIC CHALLENGE IN PRIMARY HOSPITAL

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INTRODUCTION

Liver Cirrhosis is a chronic liver disease characterized by irreversible fibrosis, lobular structure and vascular disorganization. There are many causes of cirrhosis; they include chemicals (such as alcohol), hepatitis viruses, toxic metals, and autoimmune liver disease.

CASE ILLUSTRATION

- Male, 60 years old, present with abdominal bloating, black stools, bloody vomiting and history of alcohol consumption for 10 years
- The physical examination revealed icteric skin, vascular vessels on abdomen and extremitas, anemis conjungtiva and icteric sclera, Schuffner 2 lien, ascites and bilateral legs edema.
- Laboratory Findings
  - ❑ Leukosit 3300/Ul
  - ❑ Eritrosit 1,26 jt/uL
  - ❑ Hemoglobin 4,5 g/dL
  - ❑ Hematokrit 9,5%,
  - ❑ Platelet 108.000/uL
  - ❑ Albumin 2,4 g/dL
  - ❑ Total Bilirubin 2,68 mg/dL, direct bilirubin 2.34 mg/dL and indirect bilirubin 0.36 mg/dL
  - ❑ AST and ALT with the value of 175 U/L and 79 U/L with AST/ALT ratio of 2.21
  - ❑ HbsAg non reaktif,
  - ❑ Anti HAV IgM non reaktif,
- Abdomen USG showed showed characteristic of hepatic cirrhosis and portal hypertension
- Diagnosis of liver cirrhosis was made based on clinical, laboratory, and radiologic findings.
- The patient was given supportive care to improve his general condition, because of the limitations in this hospital, the patient was referred to the secondary hospital for the further examination and treatment, also to prevent another complications that lead to worsening prognosis.

DISCUSSION

Liver Cirrhosis (With Alcohol Risk Factor)

History :
- Excessive alcohol consumption
- Presence of sign and symptoms of liver disease
- Absence of other etiology of liver injury

Physical Examination : May range from normal to the presence of signs of cirrhosis

Laboratory Findings : No single definite laboratory marker which can determine alcohol as the etiology of liver disease

Radiologic Examination : not have specific role in determining alcohol as the specific etiology

Liver Cirrhosis Compensated

Liver Cirrhosis Decompensated

Presence of complications such as ascites, a history of hematemesis melena

Candidates for a liver transplant.

- Management patients with Alcoholic Liver Cirrhocis focusses on alcohol abstinence, nutritional support including calories, vitamins and micronutrients, as well as primary and secondary prophylaxis of cirrhotic complications.
- The prognosis of the patients is evaluated using commonly used scores such as the MELD or the Child-Pugh scores

CONCLUSION

Alcohol consumption with long periode can be caused irreversible liver damage (hepatic cirrhosis) with its complication. Decompensated cirrhosis are nearing end-stage liver failure and are usually candidates for a liver transplant.

REFERENSI

1. European Association for the Study of the Liver. EASL Clinical Practice Guidelines for the management of patients with decompensated cirrhosis. Journal of Hepatology. 2018
2. Wiegand J, Berg T. The Etiology, Diagnosis and Prevention of Liver Cirrhosis. Dtsch Arztebl Int 2013; 110(6): p.85–91
3. Siti Nurdjanah. Sirosis Hepatis. In: Sudoyo AW, Setiyohadi B, Alvi I, Simadibrata MK, Setiati S (eds). Buku Ajar Ilmu Penyakit Dalam, 5th ed. Jakarta; Departemen Ilmu Penyakit Dalam Fakultas Kedokteran Indonesia. 2014.
4. Liou IW. Management of End-stage Liver Disease. Med Clin N Am 2014:98, p.119–52
5. European Association for the Study of the Liver. EASL EASL Clinical Practice Guidelines: Management of alcohol-related liver disease. Journal of Hepatology. 2018
6. Singal AK, Bataller R, Ahn J, Kamath PS, Shah VH. ACG Clinical Guideline: Alcoholic Liver Disease. Am J Gastroenterol 2018 ; 113(2): 175–94.

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27.

dr. Angela Franzeska Natalia

Liver Involvement and Severity in Patients With COVID-19

Liver Involvement and Severity in Patients with COVID-19

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Introduction

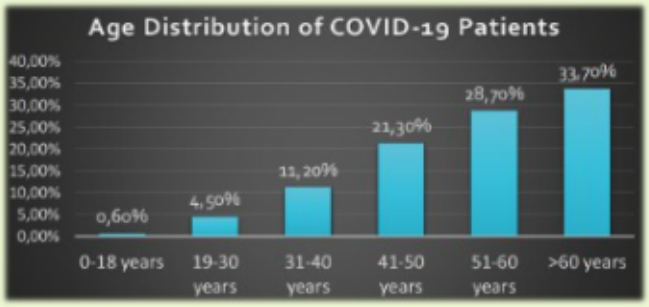
In March 2020 Pantiwilasa dr Cipto Hospital first discovered patients suspected to have COVID-19. Some evidence suggested extra-pulmonary involvement in COVID-19 patients, including liver injury. We aimed to quantify the effects of COVID-19 on the liver. We also highlighted how sex, age, and comorbidities contributed to severity of the patients.

Methods

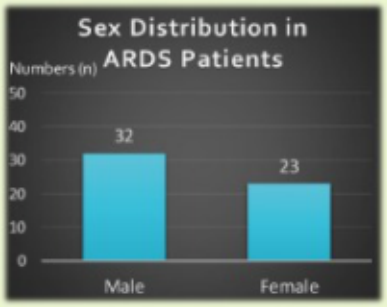
We extracted data regarding patients with PCR-confirmed COVID-19 whom admitted to our hospital from March to August 6th, 2020. Obtained data included age, sex, liver function test result, severity, and comorbidities. Age were categorized as 0-18 years old, 19-30 years old (young-adults), 31-40 years old, 41-50 years old, 51-60 years old, and >60 years old (geriatry). The regular liver function tests were AST and ALT. The upper limit of normal for liver transaminases in female and male were 19 U/L and 30 U/L, respectively. Severity was rated by ARDS (acute respiratory distress syndrome), which was measured by SpO_2/FiO_2 ≤315.

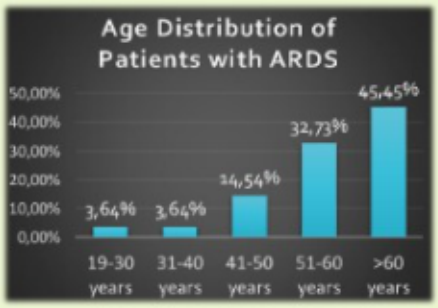
Results

Altogether, 178 patients were enrolled, with 88 men and 90 women. The patients were mostly in the sixth decade and above (33,70%). There was only 1 patient under 18 years old, who was a thirteen years old girl with elevated AST and ALT (68,6 U/L and 62,6 U/L).



ARDS was found in 55 of 178 patients (30,9%). Below are the distribution of sex and age in patients with ARDS.

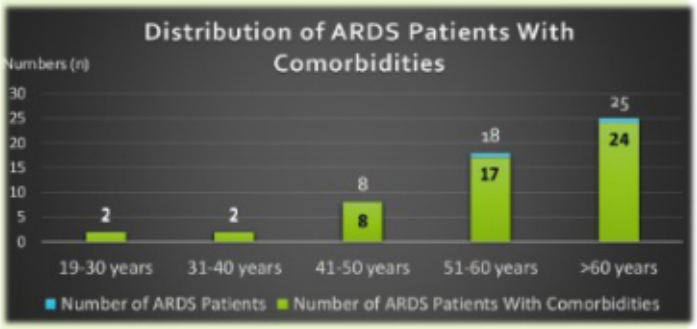




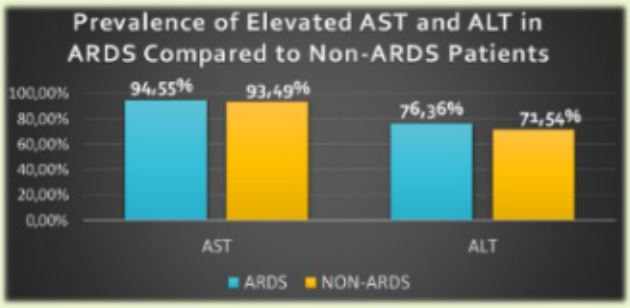
The most found comorbidities in ARDS patients were chronic heart failure (31 cases), hypertension (22 cases), diabetes mellitus (17 cases), and chronic kidney disease (8 cases). There were only 1 patient in 51-60 years age group (survived) and 1 patient in the geriatry group (deceased) who fall into ARDS without having comorbidites.

Researchers were unable to confirm the pre-existing chronic liver disease in all patients due to limitation of laboratory and physical diagnosis. However, the medical records reported one ARDS patient with liver cirrhosis and one ARDS patient with first grade fatty liver.

The patient with fatty liver was a 43 years old female, with no other comorbidities, and survived. The patient with liver cirrhosis was a 66 years old male who also had hypertension and chronic heart failure, and not survived.



Below were the prevalence of elevated AST and ALT in ARDS and Non-ARDS Patients.



Discussion

Men and elderly were more likely to have a *severe* type of COVID-19. Comorbidities are risk factors for critical patients. [1].

ALT is more spesific than AST in predicting hepatocellular injury. A study in United States showed that persons with NAFLD, whose ALT levels were higher than 19 IU/L for women and 30 IU/L for men, had 4-fold higher mortality from liver diseases compared to normal population[2]. Therefore in this research we used this parameter in predicting liver injury.

A systematic review and meta analysis study in China found that one in five COVID-19 patients will develop liver function abnormalities, especially in patients with severe disease. Higher risk of abnormal liver chemistry including increased AST and ALT were discovered in patients with severe COVID-19 than in those with non-severe disease[3].

Conclusion

Liver involvement is not uncommon in both severe and non-severe COVID-19 patients. More men than women fell into ARDS status. Geriatry group marked the most with ARDS. The top three most found comorbities in ARDS patients were chronic heart failure, hypertension, and diabetes mellitus.

References
1. Yang, J., Zheng, Y., Gou, X., et al. "Prevalence of Comorbidities and Its Effects in Patients Infected with SARS-cOv-2 : A Systematic Review and Meta-Analysis". International Journal of Infectious Diseases. 2020. vol.94. pg 91-95. https://doi.org/10.1016/j.ijid.2020.03.017
2. Dunn W, Xu R, Wingard DL, Rogers C, Angulo P, Zobair M, et al. "Suspected nonalcoholic fatty liver disease and mortality risk in a population-based cohort study". Am J Gastroenterol 2008;103:2263–2271.
3. Mao, R., He, J.S., Tao, J.Y., et al. "Manifestations and Prognosis of Gastrointestinal and Liver Involvement in Patients with COVID-19 : A Systematic Review and Meta Analysis". The Lancet Gastroenterology and Hepatology. 2020. https://doi.org/10.1016/S2468-1253(20)30126-6

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28.

dr. Lucky Natya Putri

The Role of Aspirin in the Prevention of Hepatitis B Virus-related Hepatocellular Carcinoma Development and Recurrence: A Systematic Review

THE ROLE OF ASPIRIN IN THE PREVENTION OF HEPATITIS B VIRUS-RELATED HEPATOCELLULAR CARCINOMA DEVELOPMENT AND RECURRENCE: A SYSTEMATIC REVIEW

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BACKGROUND

Hepatocellular carcinoma (HCC) is one of the most prevalent cancer worldwide. Chronic hepatitis B (CHB) is a major risk factor of HCC development. Hepatitis viral status is also linked to tumor recurrence. Another effective therapy to reduce HCC risk in this population is needed since antiviral therapy for preventing HCC has limitations. A less costly drug, aspirin, has been reported to have chemo-preventive effects on HCC.

Underlying chronic inflammation is one the key process in facilitating HCC development. Aspirin has been reported to have anti-oncogenic effects by induction of apoptosis and inhibition of cyclooxygenase. Its antiplatelet action may also play a beneficial role as platelets was shown to sustain inflammation by promoting intrahepatic CD8+T-cells accumulation in CHB.

Given the association between aspirin and HCC, the purpose of this study was to systematically review and evaluate the published studies regarding the use of aspirin and risk of HCC development in patients with hepatitis B virus (HBV) infection.

METHODS

PubMed, Cochrane, and DOAJ databases were searched for English language studies published in the last 5 years reporting the association between aspirin-use and the HCC development or recurrence risk in patients with hepatitis B virus (HBV) infection. Data about participants, study design, aspirin administration, and outcomes were extracted. Newcastle-Ottawa Assessment Scale (NOS) was used to assess the quality of cohort studies.

Figure 1. PRISMA Flowchart of Study Selection

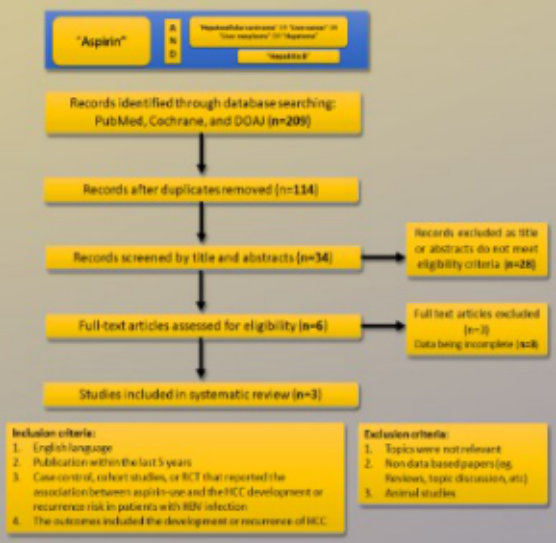

Table 1. NOS Quality Assessment of Included Studies

First Author	Study Design	Selection	Comparability	Assessment of Outcome	Total Quality Score
Lee M 2017	Cohort	***	**	***	8
Lee TY 2019	Cohort	***	**	***	8
Young S 2020	Cohort	***	**	**	7

RESULTS

A total of three studies were eligible for this review. Two cohort studies reported that aspirin-use was associated with lower risk of HCC development in CHB patients. In one cohort study, lower risk of HCC recurrence was observed among aspirin-users with hepatitis B virus-related HCC after surgical resection.

Table 2. Characteristics of included studies

First Author, Year, Study Region	Study Design	Participants	Inclusion Time	Aspirin Dose and Duration	Outcome	HR (95% CI)	Conclusion and Relevance	Limitations
Lee M, 2017, South Korea	Cohort	1674 participants Adult CHB patients with suppressed HBV (Serum HBV DNA <2,000 IU/mL) on antiviral treatment.	November 2002 - May 2015	Aspirin 100 mg/day Median duration 38.5 months	HCC occurrence, bleeding risk	HR 0.26; 95% CI 0.09-0.74, p=0.01 in time varying Cox proportional analyses. Aspirin was not associated with higher bleeding risk (HR 1.11, 95% CI 0.48-2.54, p=0.81)	Aspirin was associated with a significantly reduced risk of HCC in CHB patients with suppressed HBV DNA.	• Observational nature of the study • Potentially subject to selection bias and cofounding effects • Several imbalance factors between groups • Small number of patients receiving antiplatelet, insufficient for several subgroup analyses • Some clinical data were not available (such as, HbsAg levels, family history, glycemic status, metabolic syndrome), so the possible risk of such factors could not be evaluated.
Lee T, 2019, Taiwan	Cohort	10615 participants CHB patients without HCV infection, alcoholic liver disease, HIV infection, other viral hepatitis	January 1997 - December 2012	Aspirin ≤100 mg/day or less (98%) Median duration 3.1 years	HCC occurrence	HR 0.71; 95% CI 0.58-0.86, p<0.001 estimated by Cox's proportional analyses	Daily low-dose aspirin may be associated with lower risk of HCC development in CHB patients.	• Observational nature of the study; causal relationship of aspirin use and HCC risk could not be directly concluded • Most patients were middle aged or older • HBV viral load were not available, even though the severity of viral hepatitis were likely the same in both treatment and non-treatment groups (proportions of patients receiving NA therapy, patients with cirrhosis or liver decompensation were not different between the two groups)
Young S, 2020, Taiwan	Cohort	430 participants Patients with HBV-related HCC (HBsAg positive patients) undergoing curative resection of HCC.	October 2007 - June 2014	Aspirin dose N/A Mean duration 42.73 months Mean time of starting aspirin treatment before HCC resection 3.39 months.	HCC recurrence	HR 0.18; 95% CI 0.05-0.73, p=0.016 estimated by Cox's proportional analyses	Aspirin use may have chemopreventive effect on the recurrence of hepatitis B related HCC after curative resection.	• Observational nature of the study • Small number of cases taking aspirin (only 3,5%) • Several baseline factors related to HCC recurrence (AFP levels, fibrosis), could not be matched between treatment and non-treatment groups. • Data of HBV viral load not available

CONCLUSION

Aspirin has a potential role for preventing the development and recurrence of HBV-related HCC. Further larger-scale and high-quality studies with better design are needed to evaluate aspirin use, particularly in HBV-related HCC.

REFERENCES

Lee M, et al. Anti-platelet therapy and the risk of hepatocellular carcinoma in chronic hepatitis B patients on antiviral treatment. Hepatology. 2017; 65(5):1556-1565.
Lee TY, et al. Association of daily aspirin therapy with risk of hepatocellular carcinoma in patients with chronic hepatitis B. JAMA Intern Med. 2019;179(5):633-640.
Young S, et al. Aspirin is associated with lower recurrence risk of hepatitis B virus-related hepatocellular carcinoma after curative resection. J Formos Med Assoc. 2020;119(1):518-529.
Tse Y, et al. Gastrointestinal anti-inflammatory drugs, especially aspirin, are associated with improved survival of hepatocellular carcinoma: a meta-analysis. Cancer Manag Res. 2019;11:2695.
Marquardt P, et al. Aspirin, ibuprofen, and the risk for cholangiocarcinoma in Central Europe. Gastroenterology. 2018;154(6):1638-1651.
Fujiwara N, Singal AG, Hoshida Y. Dose and Duration of Aspirin Use to Reduce Incident Hepatocellular Carcinoma. Hepatology. 2019;70(6):2218-2219.
Sitia G, Iannacone M, Guidotti LG. Anti-platelet therapy in the prevention of hepatitis B virus-associated hepatocellular carcinoma. J Hepatol. 2018;69(6):1385-1389.

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29.

dr. Adinda Rahadini

Anticoagulant Therapy for Cirrhosis-related Portal Vein Thrombosis: A Meta-Analysiss: A Case Report

Anticoagulant Therapy for Cirrhosis-related Portal Vein Thrombosis: A Systematic Review and Meta-Analysis

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BACKGROUNDS

Portal Vein Thrombosis (PVT) remains a devastating complication in liver cirrhosis (LC) patients. It is associated with poor outcome and high short-term mortality rates, as it may enhance the risk of bleeding aside from the already established mechanism; portal hypertension. Treating cirrhosis-related PVT with anticoagulants is difficult because of the patient's nature of coagulopathy-related disorders. Thus, a systematic review and meta-analysis was done to assess the efficacy and safety of anticoagulant in cirrhosis-related PVT.

METHODS

We searched PUBMED and EMBASE from their inception to July 2020. Using random-effects meta-regression model, data were pooled to determine the odds ratio (OR) and its 95% CI.of the outcomes. The meta-analysis was conducted using Revman 5.3 software.

Patient	Patient with cirrhosis-related PVT
Intervention	Anticoagulant treatment
Control	No anticoagulant
Outcomes	Efficacy: Recanalization (partial and total) Safety: Variceal bleeding

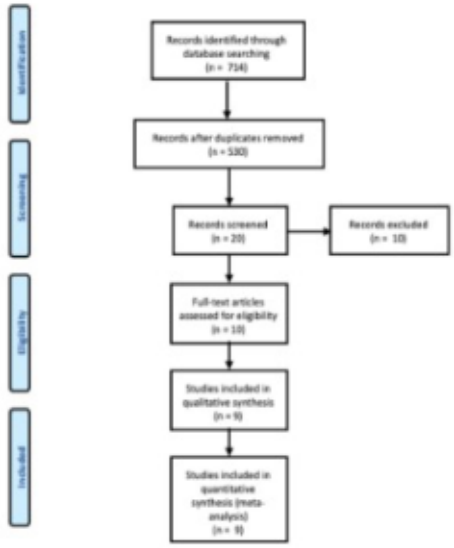


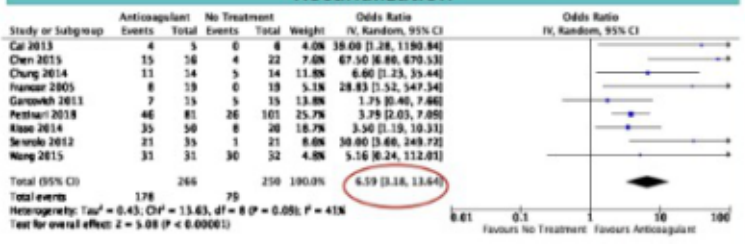
Fig1. PRISMA 2009 Flow Diagram

RESULTS

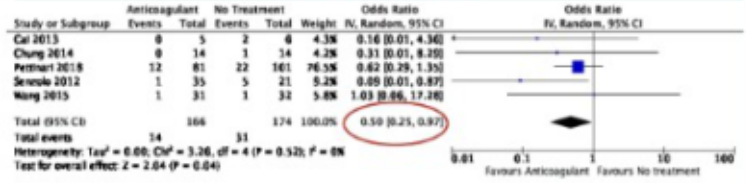
Study Characteristic

Author, year	Study design	Patients/control (n)	Type of anticoag	Duration of anticoagulant (mo)
Francoz, 2005	Case Control	19	LMWH (Nadroparin) - acenocumarol	8.1
		10	none	
Garcovich, 2011	Case Control	15	LMWH	3 - 6
		15	none	
Senzolo, 2012	Case Control	35	LMWH (Nadroparin)	6
		21	none	
Cai, 2013	Case Control	5	LMWH (2) and Warfarin (3)	3
		6	None	
Chung, 2014	Case Control	14	Warfarin	3 - 7
		14	None	
Risso, 2014	Case Control	50	NR	NR
		20	None	
Chen, 2015	Case Control	30	Warfarin	7.6
		36	None	
Wang, 2015	RCT	31	Warfarin	12
		33	None	
Pettinari, 2018	Cohort Study	81	LMWH, VKA, and Fondaparinux	13.4±14
		101	None	

Recanalization



Variceal Bleeding



One RCT and 8 observational studies comprising 516 patients were included. Pooled analysis showed that recanalization was more likely to happen in patients who received anticoagulants than in no treatment group (OR=6.59; 95%CI=3.18-13.64). Occurence of variceal bleeding was lower in the anticoagulant group (OR=0.5; 95%CI=0.25-0.97; p=0.04).

CONCLUSION

Preliminary analysis showed that anticoagulant therapy may be beneficial and safe for cirrhosis-related PVT. Further studies with RCT-design and bigger samples are needed to better elucidate its efficacy and safety.

Francoz, C., 2005. Splanchnic vein thrombosis in candidates for liver transplantation: usefulness of screening and anticoagulation. *Gut*, 54(5), pp.691-697.

Chen, H., Liu, L., Qi, X., He, C., Wu, F., Fan, D. and Han, G., 2020. *Efficacy And Safety Of Anticoagulation In More Advanced Portal Vein Thrombosis In Patients With Liver Cirrhosis.*

Pettinari, I., Vukotic, R., Stefanescu, H., Pecorelli, A., Morelli, M., Grigoras, C., Sparchez, Z., Andreone, P. and Piscaglia, F., 2019. Clinical Impact and Safety of Anticoagulants for Portal Vein Thrombosis in Cirrhosis. *The American Journal of Gastroenterology*, 114(2), pp.258-266.

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30.

dr. Adinda Rahadini

Expanding the Potential Benefits of Vitamin E in NAFLD Patients: A Meta-Analysis of Randomized Controlled Trials

Expanding the Potential Benefits of Vitamin E in NAFLD Patients: A Meta-Analysis of Randomized Controlled Trials

Adinda Rahadini[1], Nindhita Putrie Prabaswari[1], Gema Barlian Effendi[1], Budi Widodo[2]

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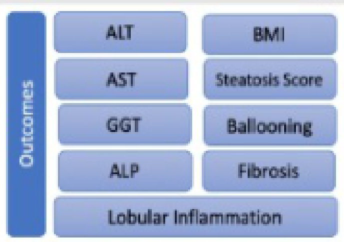
[2]Gastroenterology and Hepatobiliary Division, Department of Internal Medicine, Faculty of Medicine, Universitas Airlangga, Surabaya - Indonesia

BACKGROUNDS

- Non-alcoholic fatty liver disease (NAFLD) is characterized by lipid deposition in the liver parenchyma without significant history of alcohol consumption or other secondary causes.
- Insulin resistance and oxidative stress play a vital role in the progression towards NAFLD in all age groups.
- Currently, there is no established treatment for this disease.
- Several pilot studies have provided evidence that antioxidants such as vitamin E improve clinical and histologic features of NAFLD.

METHODS

We searched PUBMED and EMBASE from their inception to November 2019. Using random-effects meta-regression model, data were pooled to determine the weighted mean difference (WMD) of the outcomes. The meta-analysis was conducted using Revman 5.3 software.



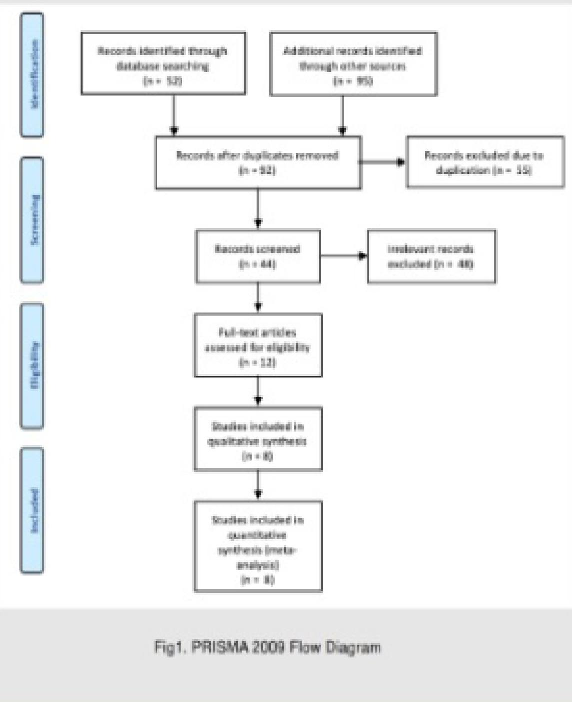


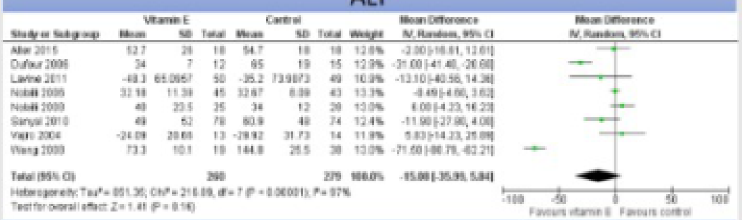
Fig1. PRISMA 2009 Flow Diagram

RESULTS

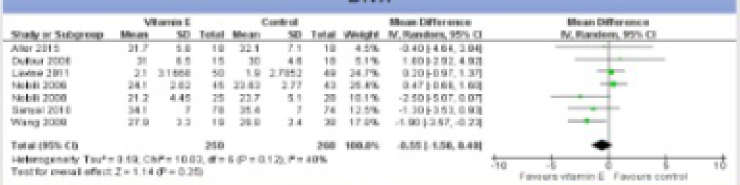
A total of 8 randomized controlled trials involving 539 NAFLD patients were included in the analysis.

AST

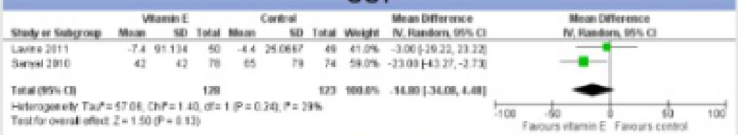
ALT



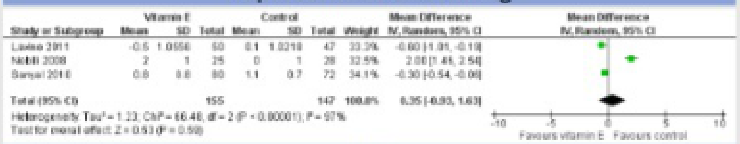
BMI



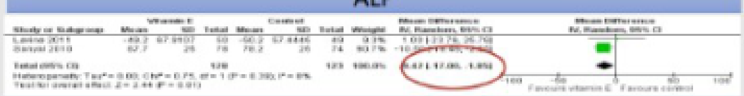
GGT



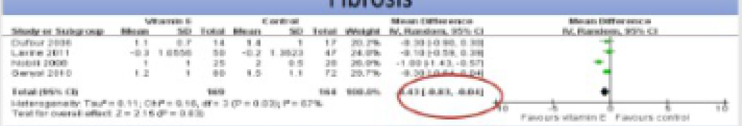
Hepatocellular Ballooning



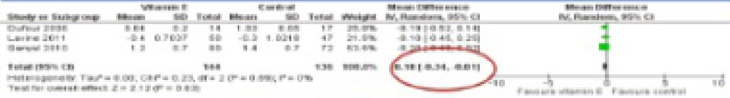
ALP



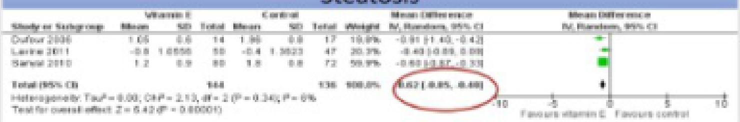
Fibrosis



Lobular inflammation



Steatosis



REFERENCES

CONCLUSION

Vitamin E as **adjuvant therapy** has potential benefits in NAFLD patients by significantly improving **biochemical and histological changes**.

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31.

dr. Dewi Larasati

Probiotic to Treat Irritable Bowel Syndrome Associated with Constipation: An Evidence-based Case Report

Probiotic to Treat Irritable Bowel Syndrome Associated with Constipation: An Evidence-based Case Report

Dewi Larasati[1], Samuel Theodorus Sutanto[2]

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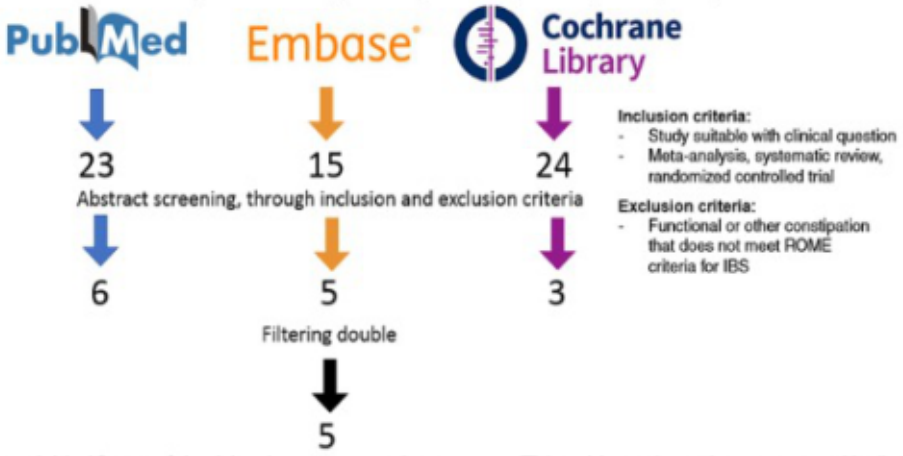
[2]Waikabubak General Hospital, and Faculty of Medicine, Krida Wacana Christian University

Background

Irritable bowel syndrome (IBS) is affecting quality of life for a lot of people due to its exaspereting symptoms. Constipation (IBS-C) is one associated symptom of IBS, the other being diarrhea (IBS-D), and mix symptoms of both (IBS-M). Treatment options for IBS-C includes strict diet, psychological stress control, and drugs to alleviate symptoms. We present a case, an adult woman with chronic abdominal discomfort that meets Rome III criteria for IBS, where constipation predominates. Beneficial effects of probiotic for IBS-C has been a debatable issue. Some studies, guidelines, and expert opinions recommend the use of probiotic in such patient.

Method

In August 13th, 2020, we performed systematic search on Pubmed, Embase, and Cochrane Library following a predefined clinical question. Keywords include; probiotic, functional, chronic, constipation, and irritable bowel syndrome.



The process yielded five useful articles that correspond to our case. This evidence-based case report critically appraised the articles for its validity, importance, and applicability based on the guideline from Oxford's Center of Evidence-Based Medicine treatment worksheet guideline.

Result

	Lyra et al	Mezzasalma et al	Kajander et al	Williams et al	Sisson et al
Sample	391	157	103	56	186
Treatment group	Group 1: Capsule 10^9 CFU of *L acidophilus*, once daily N = 129, D = 17 Group 2: Capsule 10^{10} CFU of *L acidophilus*, once daily N = 131, D = 18	Group 1: Capsule 5 x 10^9 CFU of *L acidophilus* and *L reuteri*, once daily N = 53, D =3 Group 2: Capsule 5 x 10^9 CFU of L plantarum, L rhamnosus, and B animalis, once daily N = 52, D = 2	Capsule 9 x 10^9 CFU of *L rhamnosus, B breve,* and *P freudenreichii,* once daily N = 52, D = 0	Capsule 2.5 x 10^{10} of *L acidophilus, B lactis,* and *B bifidum,* once daily N = 28, D = 0	Water-based suspension: (50 ml) 1x10^{10} CFU of *L rhamnosus, L plantarum, L acidophilus,* and *E faecium* N = 124, D = 24
Control group	Placebo capsule, once daily, N = 131, D = 16	Placebo capsule, once daily, N = 52, D = 2	Placebo capsule, once daily, N = 51, D = 0	Placebo capsule, once daily, N = 28, D = 4	Placebo capsule, once daily, N = 62, D = 10
Time	12 months	3 months	6 months	2 months	3 months

Detail: *L: Lactobacillus, B: Bifidobacterium, P: Propionibacterium, E: Enterococus, N: number of participant, D: number of participant drop out/ lost to follow up/ withdrawn from group, CFU: Colony Forming Unit*

Appraisal for Validity	Lyra et al	Mezzasalma et al	Kajander et al	Williams et al	Sisson et al
Randomised	+	+	+	+	+
Randomisation list concealed	+	Not mention	+	Not mention	+
Intention-to-treat protocol	+	-	-	-	+
Double blinding	+	+	+	+	+
Equally treated aside from experimental treatment	+	+	+	+	+
Similar baseline characteristic	+	+	+	+	+

Appraisal for Importance

Lyra et al	Mezzasalma et al	Kajander et al	Williams et al	Sisson et al
Primary outcome: IBS-SSS points at the end of 3 months follow up. No significant difference for mean IBS-SSS points between treatment and control group (p>0.05). Secondary outcome: There is a significant change in pain score at the end of 3 months follow up. Mean difference between treatment and control group is 9.5 (95%CI 0.17 – 18.8) p=0.046.	Primary outcome: Responder to IBS-C related symptom questionnaire during treatment period. Responder is defined as participant who experienced at least 30% decrease symptoms for at least 50% of intervention time. Proportion of responder: (p<0.001) F1 66-78%, NNT=3 F2 78-90%, NNT=2 F3 6-36%	Primary outcome: IBS symptoms diary (abdominal pain, distension, flatulence, borborygmi) There is a significant different in borborygmi score (p=0.008) and total symptom score (p=0.037) between treatment and control group.	Primary outcome: IBS-SSS points at the end of 2 months. There is a significant difference of mean change IBS-SSS points between treatment (-140) and control (-60) group (p<0.05).	Primary outcome: IBS-SSS points at the end of 3 months. There is a significant difference of mean change IBS-SSS points between treatment (-63) and control (-28.3) group (p=0.01)

Detail: *IBS-SSS: irritable bowel syndrome-severity scoring system, CI: confidence interval, NNT: number needed to treat*

Conclusion

We recommend the use of probiotic as treatment options for patient with irritable bowel syndrome where constipation predominates. Further study needed to appraise the correct strain combination and dosage to achieve best symptoms control result.

Reference

1. Lyra A et al. Irritable bowel syndrome symtom severity improves equally with probiotic and.... DOI: 10.3748/wjg.v22.i48.10631
2. Mezzasalma V et al. A randomized, double-blind, placebo-controlled trial: the efficacy of multispecies...DOI: 10.1155/2016/4740907
3. Kajander K et al. A probiotic mixture alleviates symptoms in irritable bowel syndrome patients:... DOI: 10.1111/j.1365.2005.02579.x
4. Williams EA et al. Clinical trial: a multistrain probiotic preparation significantly reduces... DOI: 10.1111/j.1365-2036.2008.03848.x
5. Sisson G et al. Randomised clinical trial: a liquid multi-strain probiotic vs placebo in the irritable bowel... DOI:10.1111/apt.12787

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32.

dr. Langgeng Perdhana

Duration of Hemodialysis and Hepatitis C Seroprevalence in Chronic Kidney Disease Patients Underwent Hemodialysis

Duration of Hemodialysis and Hepatitis C Seroprevalence in Chronic Kidney Disease Patients Underwent Hemodialysis

Langgeng Perdhana[1], Shofa Chasani[2], Raksi Pranindira[3]

1. General Practitioner, Roemani Muhammadiyah Hospital Semarang
2. Nephrologist, Roemani Muhammadiyah Hospital Semarang
3. Clinical Pathologist, Roemani Muhammadiyah Hospital Semarang

BACKGROUND

Hepatitis C Virus (HCV) infection increases morbidity and mortality in Chronic Kidney Disease (CKD) patients who undergoing hemodialysis. On the other hand, patients with HCV seropositive are carrier and have the potential to transmit HCV to the surrounding environment, including other patients. The purpose of this study was to determine the relationship between duration of hemodialysis and hepatitis C seroprevalence in CKD patients who undergoing hemodialysis[1,2]

METHODS

This case control study was conducted in January 2020 in Semarang. The sample study was selected by total sampling methods with inclusion criteria : undergoing hemodialysis for ≥3 months, the frequency of hemodialysis twice a week and willing to participate in this study. Patients whose data was incomplete, anti HIV +, HbsAg +, history of making tatoos and a history of high risk lifestyle were excluded from the study. Of them, 95 respondents joined in this study. Respondents were divided into 2 groups : group 1 included respondents who had HCV seropositive and group 2 included respondents who had HCV seronegative. Then duration of hemodialysis were compared between these 2 groups.

RESULTS

109 respondents underwent hemodialysis

→ Respondents were not included :
- 7 respondent did not perform hemodialysis twice a week
- 3 respondents had hemodialysis for less than 3 months

99 respondents included

→ Repondents were excluded :
- 3 respondents were HbsAg +
- 1 respondent obtained incomplete data

95 respondents participated in this study

Table 1. Characteristics Data of CKD Patients Undergoing Hemodialysis

Variable	Results
Age (years)	50,6 ± 11,2
Duration of hemodialysis (months)	24,3 ± 19,9
Total hemodialysis	181,3 ± 135,4
Hb level (gr%)	8,7 ± 1,6
eGFR	7,4 ± 3,7
Ureum Pre Dialysis (mg/dL)	121,2 ± 38,7
Creatinin Pre Dialysis (mg/dL)	11,5 ± 4
Variable	**N (%)**
Positive	37 (38,9)
Negative	58 (61,6)

Image 1. Population Study

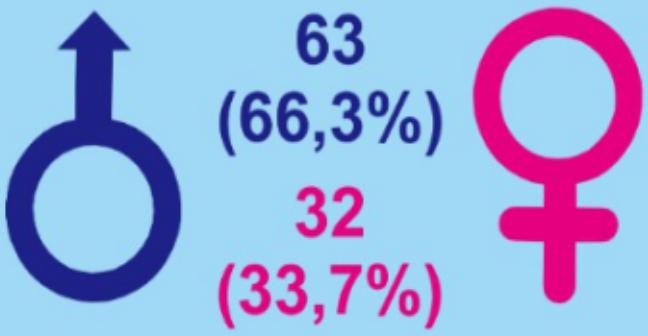
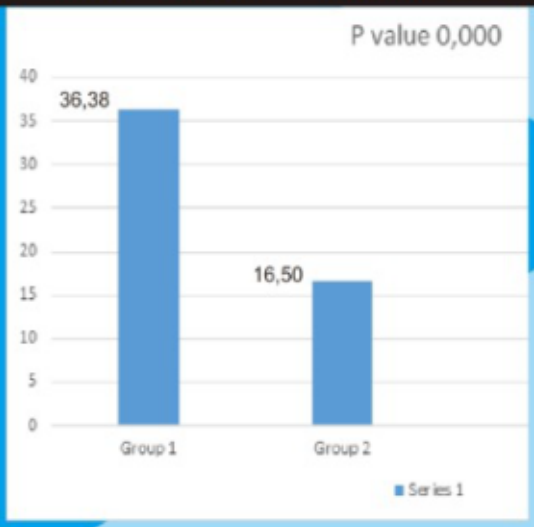


Table 2. Test of Normality

Variable	Kolmogorov Smirnov
Duration of hemodialysis	0,000

Image 2. Analysis of Hepatitis C Seroprevalence Risk Factors



CONCLUSION

There is a significant relationship between duration of hemodialysis and hepatitis C seroprevalence in CKD patients undergoing hemodialysis.

REFERENCES

1. Perhimpunan Peneliti Hati Indonesia - Perhimpunan Nefrologi Indonesia, Konsensus Nasional Penatalaksanaan Hepatitis C pada Penyakit Ginjal Kronik di Indonesia : Jakarta ; PPHI-Pernefri, 2019
2. Marinaki S, John NB, Stratigoula S, ioanna KD, Hepatitis C in Hemodialysis Patients, World J Hepatol 7(3) : 548-558. 2015

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33.

dr. Gema Barlian Effendi

Proton-pump Inhibitors Use as the Risk of Clostridium difficile Infection: A Systematic Review and Meta-analysis

Proton-pump Inhibitors Use as the Risk of *Clostridium difficile* Infection: A Systematic Review and Meta-analysis

Gema Barlian Effendi[1], Nindhita Putrie Prabaswari[1], Victoria Simanihuruk[1], Adinda Rahadini[1], Dewinta Enggar Pramesthi[1], Budi Widodo[2]

[1]Faculty of Medicine, Universitas Airlangga, Surabaya - Indonesia

[2]Gastroenterology and Hepatobiliary Division, Department of Internal Medicine, Faculty of Medicine, Universitas Airlangga, Surabaya - Indonesia

BACKGROUNDS

Proton-pump inhibitors (PPIs) have become the most widely prescribed agents throughout the world since their release. They are highly effective in treating gastric acid-related disorders but are often overprescribed without a clear indication both in hospitalized patients and outpatients. Nevertheless, like in the case of other drugs, PPIs are not as safe as it has been thought. Several studies have reported conflicting results regarding the association between PPIs use and increased risk of *Clostridium difficile* infection (CDI). Thus, a systematic review and meta-analysis was carried out to analyze the correlation between PPIs use and the risk of CDI.

METHODS

The following electronic databases were searched from PubMed, Medline, EMBASE, and Cochrane Library. A meta-analysis was conducted using RevMan 5.3 software to identify the association between PPI use and risk of CDI, analyzing the odds ratio (OR) with 95% confidence intervals (95% CIs) using a random-effect model. Inclusion criteria were observational studies (cohort and cross-sectional), human studies, studies reporting odds ratio (OR) / risk ratio (RR) for PPIs use and CDI. Studies were excluded if any of the following criteria were met: insufficient data to estimate risk of CDI and PPIs use, subject had recurrent CDI, and pediatric population. Review, meta-analysis, and case report were also excluded.

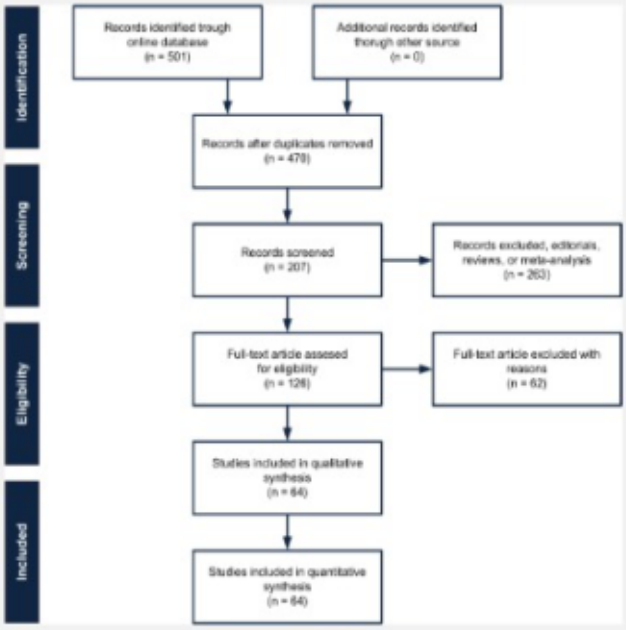
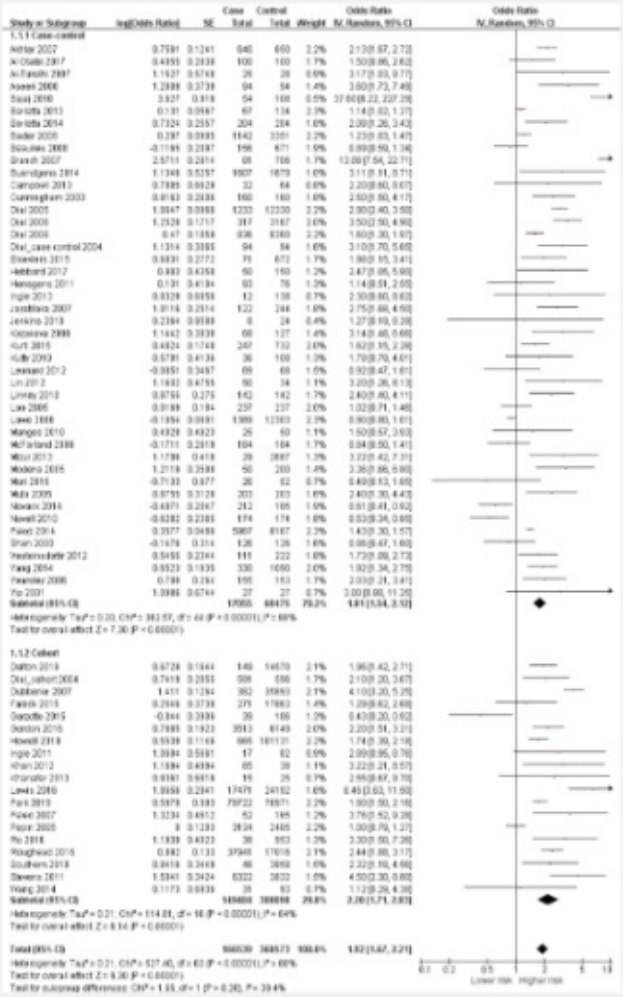


Fig1. PRISMA 2009 Flow Diagram

RESULTS



Subgroup analysis	No. of studies	OR	95%CI	Heterogeneity, I^2, %	Heterogeneity between groups, P value
Study Type					
Adjusted	47	1.92	1.66 – 2.23	89%	<0.000001
Unadjusted	17	1.85	1.20 – 2.85	87%	
Type					
Hospitalized	50	2.01	1.72 – 2.34	86%	<0.000001
ICU	5	1.24	0.83 – 1.86	55%	
Community	9	1.81	1.17 – 2.81	95%	

19 cohorts and 54 case-control studies comprising 535,112 patients were included in the analysis. Pooled analysis showed that PPIs use was associated with higher risk of CDI (OR=1.92; 95%CI=1.67-2.21; p<0.00001). Risk of CDI was even higher in the inpatient group than in ICU and community (OR=2.01; 1.72-2.34 vs OR=1.24; 0.83-1.86 dan OR=1.81; 1.17-2.81).

CONCLUSION

PPIs use was associated with higher risk of CDI, with the highest risk in an inpatient setting.

REFERENCES

Al-Tureihi, F., Hassoun, A., Wolf-Klein, G. and Isenberg, H., 2005. Albumin, length of stay, and proton pump inhibitors: Key factors in Clostridium difficile-associated disease in nursing home patients. *Journal of the American Medical Directors Association*, 6(2), pp.105-108.

Peled, N., Pitlik, S., Samra, Z., Kazakov, A., Bloch, Y. and Bishara, J., 2007. Predicting Clostridium difficile Toxin in Hospitalized Patients With Antibiotic-Associated Diarrhea. *Infection Control & Hospital Epidemiology*, 28(4), pp.377-381.

Park, Y., Seong, J., Cho, S., Han, H., Kim, J., An, S. and Gwak, H., 2019. Effects of proton pump inhibitor use on risk of Clostridium difficile infection: a hospital cohort study. *Journal of Gastroenterology*, 54(12), pp.1052-1060.

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34.

dr. Stephanie Hellen Hartoyo

Prevalence And Risk Factors Associated with Hepatitis Drug Induced (HDI) in TB-HIV Coinfection Patients in Perifer Regional Hospitals

PREVALENSI DAN FAKTOR RESIKO YANG BERHUBUNGAN DENGAN HEPATITIS IMBAS OBAT (HIO) PADA PASIEN KOINFEKSI TB-HIV DI RUMAH SAKIT DAERAH PERIFER

Stephanie Hellen Hartoyo[1], Herry Sofyan Winata[1], Kamilus K.D. Karangora[2]
1. Dokter Umum RST Wirasakti Kupang
2. Dokter Spesialis Penyakit Dalam RST Wirasakti Kupang

PENDAHULUAN

- Koinfeksi TB-HIV **menjadi penyebab mortalitas utama** bagi ODHA yaitu **27,8%**.
- **Sistem imun yang rendah** pada infeksi HIV akan meningkatkan resiko terinfeksi TB baru dan reaktivasi TB laten menjadi 20 kali lipat.
- TB merupakan infeksi oportunistik terbanyak pada ODHA yaitu 49%.[1]
- **Hepatitis Imbas Obat** (HIO) merupakan **efek samping yang berat** dari konsumsi OAT sehingga menyebabkan penderita menghentikan pengobatan.
- **Insinden HIO bervariasi** 8-39% di negara berkembang & 3-4% di negara maju.[2]

TUJUAN

Untuk **menilai prevalensi dan faktor resiko** yang **berhubungan** dengan HIO pada koinfeksi TB-HIV

METODE

Dilakukan **studi *cross sectional*** dengan menelusuri rekam medik secara retrospektif pada pasien TB dengan status HIV reaktif sejak Juli 2019 hingga Desember 2019. **Analisis** hasil penelitian menggunakan **uji *chi square*** pada 40 data rekam medik sebagai sampel yang terdiri dari 8 kasus HIO dan 32 bukan HIO **untuk menilai hubungan faktor resiko terjadinya HIO pada penderita dengan koinfeksi TB-HIV**

HASIL

Prevalensi HIO ditemukan pada **8 (20%)** pasien koinfeksi TB-HIV. **Faktor resiko yang memiliki hubungan bermakna dalam HIO (p<0,05) adalah** usia >35 tahun (p=0,01), ARV kombinasi Duviral dan Nevirapin (p=0,04), konsumsi alkohol (p=0,038), IMT< 18,5 kg/m^2 (p=0,04), hipoalbumin (p=0,01), dan CD4 <100 (p=0,01)

KESIMPULAN

Prevalensi HIO cukup tinggi pada penderita koinfeksi TB-HIV. Pemantaun faktor-faktor resiko HIO seperti fungsi hati tetap harus dilakukan untuk mengevaluasi pasien yang memiliki faktor resiko terjadinya HIO

Distribusi Gambaran Umum

Gambaran Umum	Frekuensi (n)	Proporsi (%)
Jenis Kelamin		
-Laki-laki	34	85
-Perempuan	6	15
Usia		
- 17-34 Tahun	25	62,5
- 35-52 Tahun	10	25
- >52 Tahun	5	12,5
Status Gizi		
- Gizi Kurang (IMT<18,5 kg/m^2)	12	30
- Normal (IMT 18,5-24,9 kg/m^2)	27	67,5
- *Overweight* (IMT >25 kg/m^2)	1	2,5
Lokasi Tuberkulosis		
-Paru	37	92,5
-Ekstra paru	3	7,5
Total	**40**	**100**

Distribusi Gejala HIO

Gejala	Frekuensi (%)
Nausea vomiting	4 (50)
Lemah	2 (25)
Jaundice	2 (25)

Peningkatan OT/PT pasca OAT

Derajat HIO	Sub Kategori	Hasil
1	*Mild* (OT/PT<3 kali ULN	3 (37,5 %)
2	*Moderate* (3XULN<OT/PT<5 kali ULN)	3 (37,5 %)
3	*Severe* (OT/PT>5 kali ULN)	2 (25 %)
4	*Very Severe* (OT/PT>10 kali ULN)	0

Faktor Resiko HIO pada Koinfeksi TB-HIV

Gambaran Umum	HEPATITIS IMBAS OBAT N (%)		TOTAL	UJI *Chi-Square*
	YA	TIDAK		
Usia				
> 35	7 (46,7)	8 (53,3)	15(100)	0,01*
≤ 35	1 (4)	24(96)	25(100)	
Jenis Kelamin				
Laki-laki	6 (17,6)	28(82,4)	34(100)	0,376
Perempuan	2 (33,3)	4 (66,7)	6 (100)	
Jenis Obat				
Duviral+ NVP	8 (36,4)	14(63,6)	22(100)	0,04*
TDF+3TC+EFZ	0	18(100)	18(100)	
Lokasi TB				
Paru	7 (18,9)	30(81,1)	37(100)	0,548
Extra Paru	1 (33,3)	2 (66,7)	3 (100)	
Konsumsi Alkohol				
Ya	6 (35,3)	11 (64,7)	17 (100)	0,038*
Tidak	2 (8,7)	21(91,3)	23 (100)	
IMT				
< 18,5	6 (46,2)	7(53,8)	13 (100)	0,04*
≥ 18,5	2 (7,4)	25 (92,6)	27 (100)	
Albumin				
< 3,5	6 (54,5)	5 (45,5)	11(100)	0,01*
≥ 3,5	2 (6,8)	27 (93,2)	29(100)	
CD4				
< 100	7 (50)	7 (50)	14(100)	0,01*
≥ 100	1 (3,9)	25 (96,1)	26(100)	
Total	8(20)	32(80)	40(100)	

* = Bermakna

Daftar Pustaka
1. Nuryastutik, T. Koinfeksi TB-HIV dan Kaitannya dengan TB MDR. http://libmed.ugm.ac.id/download.php?file=pad%5Epdf%5E149%5E1348082016110 9. [30 Juli 2020]
2. Pranata JR, Mariadi IK, Somayana G. Prevalensi dan Gambaran Umum Drug-Induced Liver Injury Akibat Obat Anti Tuberkulosis pada Pasien Tuberkulosis RSUP Sanglah Denpasar Periode Agustus 2016-Juli 2017. Jurnal Medika Udayana. 2019;8(9):p1-13
3. Luthariana L, Karjadi TH, Hasan I, dan Rumende CM. Faktor Resiko Terjadinya Hepatotoksisitas Imbas Obat Antituberkulosis pada Pasien HIV/AIDS. Jurnal Penyakit Dalam Indonesia. 2017;4(1):p23-28
4. David S & Hamilton JP. Drug-Induced Liver Injury. US Gastroenterol Hepatol Rev. 2010;6: p73–80.
5. Rifa'i A, Herlianto B, Mustika S, Pratomo B, dan Supriono. Insiden dan Gambaran Klinis Hepatitis Akibat Obat Anti Tuberkulosis di Rumah Sakit Umum Daerah Dr. Saiful Anwar Malang. Jurnal Kedokteran Brawijaya. 2015;28(3):p 238-241
6. Bayupurnama,P. Hepatotoksisitas Imbas Obat. In: Setiati S, Alwi I, Sudoyo AW, Simadibrata MK, Setiyohadi B, et al, editors. Buku Ajar Ilmu Penyakit Dalam. 6th rev.ed. Jakarta: Interna Publishing
7. Bisaso KR, Owen JS, Ojara FW, et al. Characterizing plasma albumin concentration changes in TB/HIV patients on anti retroviral and anti –tuberculosis therapy. In Silico Pharmacol.2014;2(3):p 1-8
8. Butura, A. Drug and Alcohol Induced Hepatoxicity. 2008. Stockholm, Sweden: Karonslika Institutes

VIRTUAL WORKSHOP DAN SYMPOSIUM
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35.

dr. Herry Sofyan Winata

Plain Photographs of Thorax Covid-19 Patients with Gastrointestinal Manifestations in the Peripheral Region

RADIOLOGI FOTO POLOS THORAK PADA PASIEN COVID-19 DENGAN MANIFESTASI GASTROINTESTINAL DI DAERAH PERIFER

Herry Sofyan Winata[1], Stephanie Hellen Hartoyo[1], Kamilus K.D Karangora[2]
1. Dokter Umum RST Wirasakti Kupang
2.Dokter Spesialis Penyakit Dalam di RST Wirasakti Kupang

Pendahuluan :

Covid-19 menjadi pandemi global karena penularan yang lebih agresif. Indonesia menjadi peringkat ketiga di Asean dalam menyumbang kasus Covid-19. NTT juga ikut mengalami dampak dari pandemi global ini. Manifestasi Covid-19 tidak hanya pada pernapasan tetapi juga pada gastrointestinal. Radiografi thoraks memiliki peran yang sangat penting terutama dalam skrining dan penegakan diagnosa Covid 19 terutama dalam membantu pasien covid 19 dengan manifestasi gastrointestinal lebih dominan.

Tujuan :

Untuk mengetahui gambaran radiologi toraks pasien covid-19 dengan manifestasi gastrointestinal yang lebih dominan di Rumah Sakit Tentara Wirasakti Kupang periode April 2020 sampai Juli 2020.

Metode:

Penelitian deskriptif yang dilakukan secara retrospektif dengan pengambilan sampel berupa teknik total sampling. Jenis sampel penelitian ini adalah pasien suspek dan atau terkonfirmasi covid-19 yang memiliki manifestasi gastrointestinal lebih dominan di Rumah Sakit Tentara Wirasakti Kupang periode April 2020 sampai Juli 2020 dan telah melakukan foto toraks

Hasil :

Dari 16 orang dengan kecurigaan covid-19. 8 pasien terkonfirmasi covid-19 dan 8 sisanya dengan rapid reaktif. Masing masing dari kelompok tersebut memiliki 3 pasien dengan manifestasi gastrointestinal. Manifestasi gastrointestinal yang dialami pasien covid-19 adalah sebesar 37,5% dan manifestasi yang paling banyak adalah diare sebanyak 25%. Prevalensi laki-laki lebih banyak dari perempuan yaitu 56%. Kelompok distribusi umur terbanyak adalah rentang usia 20-29 tahun (25%). Kelompok pekerjaan yang beresiko terpapar covid-19 (31,25%) adalah pedagang dan tenaga kesehatan. 33% pasien covid-19 dengan manifestasi gastrointestinal yang lebih dominan menunjukkan kelainan dalam radiologi thoraksnya. Pola abnormalitas yang paling banyak dijumpai adalah *unilateral subpleural GGO* dengan tingkat keparahan yang ringan. Sementara pada kasus sedang dan berat dijumpai gambaran konsolidasi lobus tengah perifer unilateral dan bilateral multifokal peripheral.

Manifestasi Gastrointestinal Pasien Covid-19

Kasus	*Manifestasi Gastrointestinal*	*Mual*	*Muntah*	*Diare*	*Nyeri perut*
terkonfirmasi	3	1	1	2	1
Rapid reaktif	3	2	0	2	1
TOTAL	6 (37,5%)	3 (18,75%)	1 (6,25%)	4 (25%)	2 (12,5%)

Sebaran kasus dan case fatality rate COVID-19 berdasarkan usia dan jenis kelamin

Jenis kelamin /Usia	Kasus (%) (n=16)	*Case Fatality Rate* (n=16)
Laki -laki	52, 1	6,25
Perempuan	47,9	0
0-9	12,5	0
10-19	0	0
20-29	25	0
30-39	12,5	0
40-49	18,75	0
50-59	12,5	0
60-69	12,5	6,25
70-79	0	0

Diagram Data Pekerjaan Pasien Covid-19

Data radiografi thorax pada pasien covid-19 di RST Wirasakti Kupang

Laki laki	3	
Perempuan	2	
Normal	11	
Abnormal	5	
PATTERN ABNORMALITY(5	TOTAL	SEVERITY
GGO		
Unilateral	3	Ringan
Bilateralmultifocal peripheral	1	Berat
Consolidation		
Unilateral	1	Ringan/Sedan
Bilateral	0	

Kesimpulan:

Pemeriksaan radiologi thoraks dapat membantu skrining dan penegakan diagnosa dari covid-19 di daerah perifer terutama untuk fasilitas kesehatan yang tidak mempunyai alat pencitraan. Sekitar 30% pasien covid-19 menunjukkan kelainan di radiologi thoraxnya.

- Daftar Pustaka
1.WHO. Infection prevention and control of epidemic-and pandemic-prone acute respiratory diseases in health care. WHO Interim Guidelines, June 2007. http://www.who.int/csr/resources/publications/csrpublications/en/index7.html" [30 Juli 2020]
2.Yuliana. Corona virus disease (Covid-19); Sebuah Tinjauan Literatur. Wellness and Healthy Magazine.2020;2(1):p.187-192
3.Gugus Tugas Percepatan Penanganan Covid-19.2020. Data Sebaran Situasi Terkini Covid-19 di Indonesia. https://covid19.go.id/ [30 Juli 2020]
4.Icksan AG & Muljadi R. 2020. Radiologi toraks Pneumonia COVID-19. Semarang: Penerbit CV.PILAR NUSANTARA
5. Azwar MK, Kirana F, Kurniawan A, Handayani S, Setiati S. Gastrointestinal Presentationin Covid-19 in Indonesia: A Case Report. Acta Med Indones-Indones J Intern Med.2020;52(1):63-67
6.Wong SH, Lui RN, Sung JJ. Covid-19 and The Digestive System. J.Gastroenterol Hepatol. 2020;35(5):744-748
7.Burhan E, et al. Pneumonia Covid-19 Diagnosis & Penatalaksanaan di Indonesia. Jakarta: Perhimpunan Dokter Paru Indonesia (PDPI);2020.p.1-55

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36.

dr. Garry Aditya Pranata

The Efficacy of Obeticholic Acid for Improving Liver Histology in Patients with Non-Alcoholic Steatohepatitis (NASH): A Systematic Review

The Efficacy of Obeticholic Acid for Improving Liver Histology in Patients with Non-Alcoholic Steatohepatitis (NASH): A Systematic Review

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Background

Non-alcoholic steatohepatitis (NASH) is an increasingly common cause of chronic liver disease, which can progress to cirrhosis, hepatic decompensation, hepatocellular carcinoma, and liver-related death. Currently, there are no approved therapeutic options for NASH. Recent studies showed that obeticholic acid improved liver histology of NASH, including fibrosis.

Objective

To evaluate the efficacy of obeticholic acid in improving liver histology (fibrosis, steatosis, or other parameters) of NASH patients.

Methods

We systematically searched PubMed, CENTRAL, and Springer, using the following keywords: Obeticholic acid AND ("Non-alcoholic steatohepatitis" or NASH) AND (hepatic fibrosis or steatosis) until July 2020. Review articles and study in animals were excluded. The study selection process was plotted using a Preffered Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram.

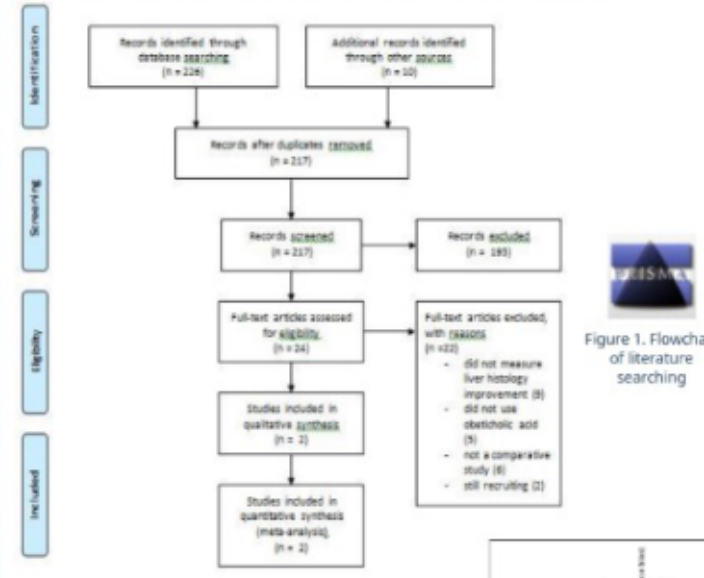

Figure 1. Flowchart of literature searching

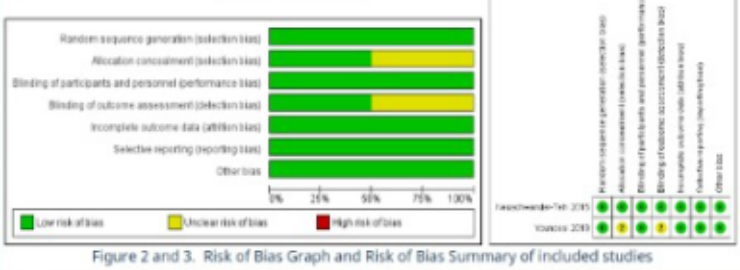

Figure 2 and 3. Risk of Bias Graph and Risk of Bias Summary of included studies

Result

Two RCTs were included. All studies use obeticholic acid as the intervention and placebo as control.

No	Author	Location	Design	Publication year	Study Characteristics
1	Younossi et al	Multicentre, conducted at 332 centres in 20 countries	RCT	2019	Sample size: 931 NASH patients Mean age: Intervention group= 55, control group= 55 Duration: 18 months
2	Neuschwander-Tetri et al	Multicentre, United States	RCT	2014	Sample size: 283 NASH patients Mean age: Intervention group= 52, control group=51 Duration: 18 months

Table 1. Characteristics of Included Studies

No	Author	Intervention	Comparator	Primary Outcome		Secondary Outcome	
				Obeticholic Acid	Control	Obeticholic Acid	Control
1	Younossi et al	(n=308) Added Obeticholic acid 25mg/day	(n=311) Control group	1.Improvement of fibrosis with no worsening of NASH:71 (23%) patients (p<0.001, RR 1.9, 95% CI 1.4-2.8) 2. Resolution of NASH (based on no hepatocellular ballooning and no residual lobular inflammation) with no worsening of fibrosis : 36 (12%) patients (p=0.13, RR 1.5, 95% CI 0•9-2•4)	1.Improvement of fibrosis with no worsening of NASH: 37 (12%) patients 2. Resolution of NASH with no worsening of fibrosis : 25 (8%) patients	1. ≥1-point improvement in lobular Inflammation : 136 (44%) patients (p<0.05, RR 1.2, 95% CI 1.0–1.5) 2. ≥1-point improvement in hepatocellular ballooning : 108 (35%) patients (p<0.001, RR 1.5, 95% CI 1.2–2.0) 3.. ≥1-point improvement in steatosis : 127 (41%) patients (p=0.40, RR 1.1, 95% CI 0.9–1.3) 4. ALT (U/L) : -36 5. AST (U/L) : -20.4 6. GGT (%) : ↓36 7. ALP (%) : ↑20 8. LDL (mg/dL): +2.7	1. ≥1-point improvement in lobular inflammation : 111 (36%) patients 2. ≥1-point improvement in hepatocellular ballooning : 72 (23%) patients 3. ≥1-point improvement in steatosis : 118 (38%) patients 4. ALT (U/L) : -15.6 5. AST (U/L):-9.8 6. GGT (%) : ↑1 7. ALP (%) : ↓1 8. LDL(mg/dL) : -7.1
2	Neuschwander-Tetri et al	(n=110) Added Obeticholic acid 25mg/day	(n=109) Control group	Improvement of liver histology (2-point or greater improvement in NAFLD activity score without worsening of fibrosis) : 50 (45%) patients (p<0.001, RR 1.9, 95% CI 1.3 to 2.8)	Improvement of liver histology : 23 (21%) patients	1. Improvement of fibrosis : 36 (35%) patients (p<0.01, RR 1.8, 95% CI 1.1 to 2.7) 2. Improvement in hepatocellular ballooning : 47 (46%) patients (p<0.05, RR 1.5 , 95% CI 1.0 to 2.1) 3. Improvement in steatosis : 62 (61%) patients (p<0.05, RR 1.7, 95% CI 1.2 to 2.3) 4. Improvement in lobular inflammation : 54 (53%) patients (p<0.01, RR 1•6, 95% CI 1.1 to 2.2) 5. ALT (U/L) :-38 (p<0.001) 6. AST (U/L): -27 (p<0.001) 7. ALP (U/L) : +12 (p<0.001) 8. GGT (U/L) :-37 (p<0.001) 9. LDL (mmol/L): +0.22 (p<0.001)	1. Improvement of fibrosis : 19 (19%) patients 2. Improvement in hepatocellular ballooning : 30 (31%) patients 3.Improvement in steatosis : 37 (38%) patients 4. Improvement in lobular inflammation : 34 (35%) patients 5. ALT (U/L):-18 6. AST (U/L) :-12 7. ALP (U/L) : -6 8. GGT (U/L): -6 9. LDL (mmol/L): -0.22

Table 2. Summary Table of Included Studies

In obeticholic acid group, both studies showed significant improvement in liver fibrosis, lobular inflammation and hepatocellular ballooning. One study showed significant improvement in steatosis in obeticholic acid group, whereas other study didn't (p=0.40). All studies showed decrease serum aminotransferase, γ-glutamyl transpeptidase and increase serum alkaline phopatase, LDL cholesterol from baseline in obeticholic acid group.

Discussion

All studies met the primary endpoint of improvement in liver histology. Obeticholic acid is a farnesoid X receptor agonist, which decreases hepatic lipogenesis by down-regulating the transcription factor SREBP1c and increasing S1RT1. These effects could play a part in the beneficial effect of obeticholic acid in NASH. Treatment with obeticholic acid had a beneficial effect on markers of hepatocellular injury (ALT and AST) and oxidative stress (GGT). However, a farnesoid X receptor agonist reduces bile acid synthesis by inhibiting the conversion of cholesterol to bile acids, which could increase serum cholesterol and might account for the changes in serum cholesterol concentrations recorded during obeticholic acid treatment.

Conclusion

Obeticholic acid significantly improved liver histology in NASH patients, including fibrosis, lobular inflammation, and hepatocellular ballooning. Further studies are needed to determine long-term benefits and safety in NASH patients.

References

1. Younossi ZM, Ratziu V, Loomba R, et al. Obeticholic acid for the treatment of non-alcoholic steatohepatitis: interim analysis from a multicentre, randomised, placebo-controlled phase 3 trial. Lancet 2019; 394: 2184-96
2. Neuschwander-Tetri BA, Loomba R, Sanyal AJ, et al. Farnesoid X nuclear receptor ligand obeticholic acid for non-cirrhotic, non-alcoholic steatohepatitis (FLINT): a multicentre, randomised, placebo-controlled trial. Lancet 2015; 385: 956-65.
3. Calkin AC, Tontonoz P. Transcriptional integration of metabolism by the nuclear sterol-activated receptors LXR and FXR. Nat Rev Mol Cell Biol 2012; 13: 213-24.
4. de Aguiar Vallim TQ, Tarling EJ, Edwards PA. Pleiotropic roles of bile acids in metabolism. Cell Metab 2013; 17: 657-69.

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37.

dr. Novita Ikbar Khairunnisa

Unusual Clinical Presentation
of Covid-19 with Severe Chest Pain from GERD:
A Case Report

Unusual Clinical Presentation of COVID-19 with Severe Chest Pain from GERD: A case report

[1] **Novita Ikbar Khairunnisa,** [1,2] **Hery Djagat Purnomo,** [1,3] **Onggo Wiliyanto,** [3] **Rofat Askoro**

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Introduction

COVID-19 or novel Corona Virus Disease 2019 is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The main symptoms of this viral infection are shortness of breathing, fever, fatigue and cough. COVID-19 gastrointestinal manifestation cases are increasing nowadays therefore we present a unique case of COVID-19 positive present with intense chest pain aggravated by swallowing correlated with GERD

Case Report

A 26 years old female admitted to hospital with chief complaint of sudden constant severe bilateral chest pain aggravated by swallowing, lack of appetite, weight loss and fatigue, for two days. Chest pain described as tearing pain radiated to both side of chest, shoulders, back and arms. One week before admission GERDQ score was 5. Fever, cough and difficulty in breathing were denied. Laboratory examinations revealed mild hypokalemic and slight increase in creatinine levels. Chest X-ray appeared normal. She received lansoprazole 8mg/hour as chest pain and odynophagia were not significantly improved. GERDQ score was recalculated and scored 13. Esophagogastroduodenoscopy (EGD) was suggested, showing Los Angeles grade A esophagitis and anthral gastritis (**Figs. 1 & 2**). Histological examination of anthral specimens presented with plasma cell, lymphocytes infiltration and erosion. Nasopharyngeal swab result was positive using real time reverse transcription polymerase chain reaction (RT-PCR) for SARS-CoV-2.

Fig.1 *EGD demonstrated inflammation on lower esophagal sphincter with erosion on single mucosal fold classified as LA Grade A esophagitis .*

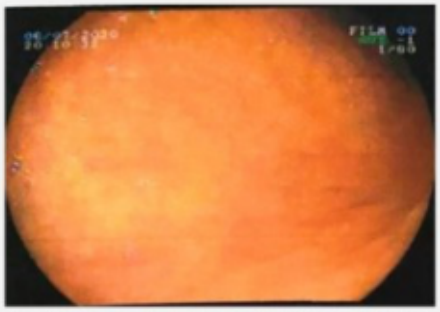

Fig.2 *EGD demonstrated inflammation on athrium of gaster.*

Discussion

- COVID-19 has caused severe viral pneumonia which lead to respiratory distress even death around the world.[1]
- But there are evidences of possible extra respiratory symptoms.[2–4] .Prevalence of gastrointestinal symptoms ranged from 3%-39.6%[5]. GI symptoms mostly present as lack of appetite, diarrhea, nausea, abdominal pain, and vomiting.[6]
- A study with 1233 patients enrolled, revealed that GerdQ score and the severity of reflux esophagitis were positively correlated[7]
- Our case showed increase of GERDQ score from five to thirteenth, we suggest COVID -19 co-infection made GERD symptoms worsen

Conclusion

Clinicians should be aware of the gastrointestinal clinical manifestation of Covid-19, especially increasing cases of atypical presentation are recognized.

References

1. Guan W, Ni Z, Hu Y, Liang W, Ou C, He J, et al. Clinical characteristics of coronavirus disease 2019 in China. N Engl J Med. 2020;382(18):1708–20.
2. Zhang H, Kang Z, Gong H, Xu D, Wang J, Li Z, et al. Digestive system is a potential route of COVID-19: An analysis of single-cell coexpression pattern of key proteins in viral entry process. Gut. 2020;69(6):1010–8.
3. Article R. COVID-19 and the Digestive System. Am J Gastroenterol. 2020;2019:1003–6.
4. Wong SH, Lui RNS, Sung JJY. Covid-19 and the digestive system. J Gastroenterol Hepatol. 2020;35(5):744–8.
5. Schmulson M, Dávalos MF, Berumen J. Beware: Gastrointestinal symptoms can be a manifestation of COVID-19. Rev Gastroenterol México 2020;
6. Pan L, Mu M, Yang P, Sun Y, Wang R, Yan J, et al. Clinical Characteristics of COVID-19 Patients With Digestive Symptoms in Hubei, China. Am J Gastroenterol. 2020;115(5):766–73.
7. Wang M, Zhang JZ, Kang XJ, Li L, Huang XL, Aihemaijiang K, et al. Relevance between GerdQ score and the severity of reflux esophagitis in Uygur and Han Chinese. Oncotarget. 2017;8(43):74371–7.

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38.

dr. Ade Toni Feri Heryanto

43 Years Old Woman with Secondary Budd-Chiari Syndrome caused by Hilar Cholangiocarcinoma and Hepatitis C

43 YEARS OLD WOMAN WITH SECONDARY BUDD-CHIARI SYNDROME CAUSED BY HILAR CHOLANGIOCARCINOMA AND HEPATITIS C

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BACKGROUND

Budd-Chiari Syndrome is a rare disease that occurs in about 0,001% of the population and has a variety of potential etiologies.

CASE PRESENTATION

We report a 43-year-old woman presented with a mass in the right upper quadrant abdomen, abdominal pain, ascites, hepatomegaly, icteric and weight loss. Labs on admission were notable for albumin 2,4 g/dl, bilirubin 0,8 mg/dl, positive anti-HCV, ALP 252 U/L and GGT 81 U/L. Abdominal USG showed hepatomegaly, ascites, intrahepatic bile duct enlargement, hyperechoic mass on the hilus and hepatic vein thrombus. Abdominal CT scan showed inhomogeneous solid cystic mass on the hepatic hilus with intra and extra hepatic bile ducts enlargement. From ERCP, CBD size was normal, right and left IHBD dilated. We did a brush biopsy smear resulting amorphous mass in bile pigments, flattened and columnar epithelium, macrophages, with increased N/C ratio, mild pleomorphic; as described in hilar cholangiocarcinoma. Pathological examination from liver biopsy revealed parenchymal tissue of the liver composed of polygonal cells with oval round nuclei, relatively uniform, eosinophilic cytoplasm, arranged in plates consisting of 1-2 hepatocytes, including sinusoidal centrilobular dilatation and extravasation of erythrocytes with infiltrate neutrophils, lymphocytes, and histiocytes; as described in Budd-Chiari Syndrome.

DISCUSSION

The diagnosis of BCS should be considered in all patients with clinical signs as follow: 1). Abdominal pain, hepatomegaly and ascites that occur rapidly, 2). Massive ascites with slight changes of the liver physiology tests, 3). Fulminant liver failure accompanied by hepatomegaly and ascites, 4). Chronic liver disease whose unclear cause, 5). Liver disease with thrombogenic disease. Advances in imaging have made most BCS diagnosable based on non-invasive imaging studies. In this case, hepatitis C is one of the predisposing factors of hilar cholangiocarcinoma, then hilar cholangiocarcinoma is the cause of Budd-Chiari Syndrome.

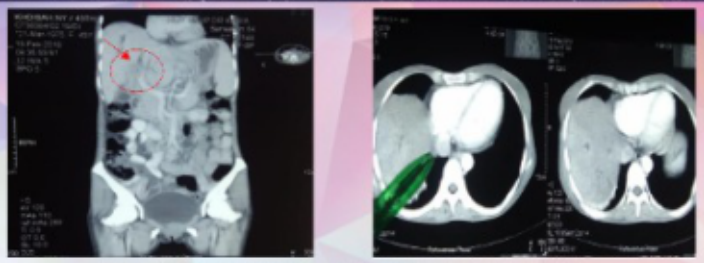

Figure 1. Abdominal CT. Inhomogenous solid tumor mass in the hilar hepatic region measuring 6.69 x 5.68 x 5.87 which causes dilation of the bile duct, suspicious Cholangio carcinoma (klatskin tumor)

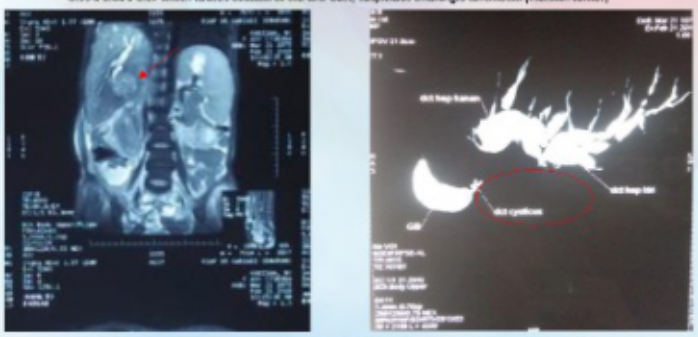

Figure 2. ERCP. Inhomogenous solid mass in the form of lobulated hilar hepatic pressing and causing dilatation of the right and left hepatic duct size 6.1x3.99x4.37 cm supports the appearance of hilus cholangio ca (klatskin tumor type bismuth I corlette classification) Hepatosplenomegaly

Figure 3. Abdominal Sonography. Hepatic vein thrombus, Hilus hepatic mass, Dilation of the intrahepatic bile duct, hepatomegaly and ascites

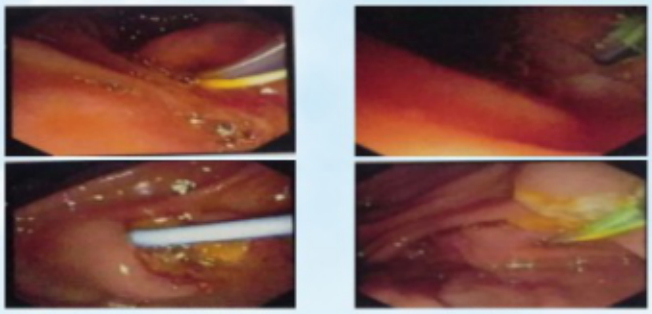

Figure 4. dilatation of right and left ihbd. Sphincterectomy was performed and a 7f 12 cm stent was placed

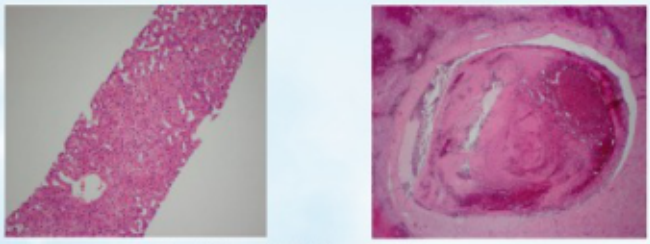

Figure 5. Sinusoidal dilatation and vein thrombus

CONCLUSIONS

Secondary Budd-Chiari Syndrome is present when the hepatic veins are compressed or invaded by a lesion that originates outside of the vein (e.g. a malignancy). In this case, the therapy for this patient is radiotherapy or surgery as well as stenting, providing antivirus for hepatitis c and administration of anticoagulants.

Keywords : Budd Chiary Syndrome, Hillar Cholangio Carcinoma, Hepatitis C


TAMAN
INDONESIA Kaya