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Case Report

Clinical approach and diagnosing ulcerative colitis in a 55 years old man patient: a case report

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ABSTRACT

This article reports a 55 years old man came to the emergency department with complaint fatigue and weakness since 6 day ago. Patient have 1 week history of diarrhoea with abdominal pain since 1 day ago. Patient also had nausea since 1 day ago. The patient does not take NSAID. Physical examination showed abdominal distention and pain on left iliac region. Colonoscopy showed many ulcus from rectum towards the descendent colon. The diagnosis of ulcerative collitis were made. The patient was treated with amino salisilate, antibiotics, steroids medications and showed clinical remission.

Keywords: IBD, Ulcerative Collitis, Colonoscopy

INTRODUCTION

Ulcerative colitis (UC) is an inflammatory bowel disease with spreading colonic inflammation characteristics. UC is a disease with continuous unbridled inflammation in colon. UC inflammation affect from proximal towards the distal of the colon segments. Usually, the terminal ileum is not relevant, but some patients with involved terminal ileum called backwash ileitis. UC may be discovered at any age, the most incidence occur in age 55-65 years.[1,2]

UC and Crohn's disease (CD) are a disease that affect genetic, immunologic and histopathologic. UC and CD was group of bowel disorders called inflammatory bowel disease (IBD).[3]

Patients with UC mostly be found diarrhea with blood, abdominal pain, and rectum bleeding, wherein Chron's patients usually occur diarrhea and abdominal pain with higher chance to encounter systemic features as well as fatigue, fever, loss of appetite up to weight loss.[3]

Even though the precise etiology of UC still foggy, the etiology was estimated to many interactions among variety factors. UC can occur by lifestyle such as high sugar and fat diet, stress, drug use and smoking and genetic factor. The most extreme complication from UC is colon cancer.[5]

CASE REPORT

A 55 years man came to Wangaya emergency room with chief complaint fatigue and weakness since 6 day ago. Patient have 1 week history of diarrhea with abdominal pain since 1 day ago. Patient also mention he had nausea since 1 day ago. The patient did not take non-steroidal anti-inflammatory drugs. This man was a smoker since 10 years ago and smoked around 10 cigarettes each day.

Physical examination showed a blood pressure of 113/72 mmHg, 90 beats per minute, rate of respiratory was 18 times per minute, body temperature of 38.2^{o}C, oxygen saturation level of 98% on room air. On the abdominal exam, there was a presence of abdominal distention and the patient feel pain on left iliac region.

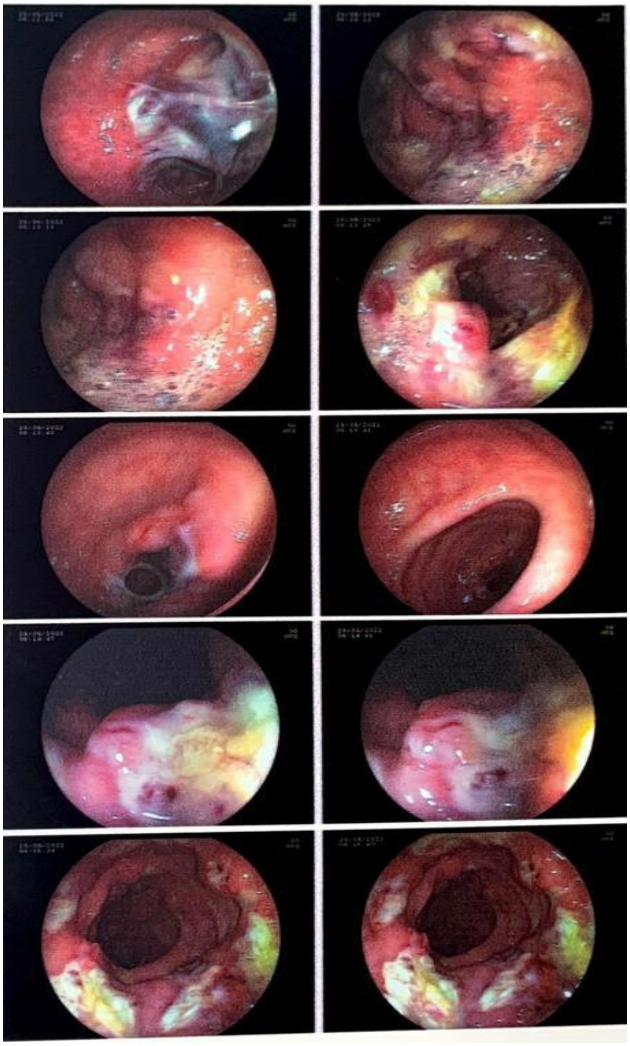

Figure 1: Colonoscopy of the patient.

The laboratory examination results were white blood cells 14.5×10^3/µL, haemoglobin level 14.1 g/dL, haematocrit 42.4%, platelet count 300×10^3/µL, AST 21 U/L, ALT 18 U/L, BUN 11 mg/dL, serum creatinine 0.97 mg/dL, random blood glucose 138 mg/dL; natrium 134 mmol/L, kalium 3.5 mmol/L, chloride 99 mmol/L.

The macroscopic stool laboratory showed watery stools with yellow colour and positive mucous. Whereas the miscroscopic stool showed white blood cells 14-15 / hpf and red blood cells 4-5/ hpf. This patient also received a stool culture test with negative *Escherichia Coli*, *Salmonella* and *Shigella* pathogen.

On the colonoscopy examination, it revealed normal anus and many ulcus from rectum towards the descendent colon. Pathological finding showed bleeding and congestion on vascular mucosa, and infiltration of neutrophils

The diagnosis of ulcerative collitis were made. The patient received treatment oral sulfasalazine 3 times a day, 2 tabs each; Intravenous paracetamol 1-gram TID; intravenous levofloxacin 750 mg OD; intravenous ondansetron 4 mg TID, intravenous esomeprazole 40 mg BID, intravenous methylprednisolone 62.5mg BID.

DISCUSSION

UC is an inflammatory bowel disease with spreading colonic inflammation characteristics. UC is a disease with continuous unbridled inflammation in colon. UC inflammation affect from proximal towards the distal of the colon segments. Usually, the terminal ileum is not relevant, but some patients with involved terminal ileum called backwash ileitis. UC may be discovered at any age, the most incidence occur in age 55-65 years.[1,2]

Two main types of inflammatory bowel disease are UC and CD. UC is an inflammatory bowel disease that usually affect rectum towards proximally, that usually affect the entire colon. Chron disease is inflammation that occur across the entire wall of gastrointestinal mucosa, can be found from oral cavity to anus.[3,7]

UC can be diagnosed by history taking, physical examination, stool examination, colonoscopy and biopsy examination. These steps are conducted to confirm the diagnose of colitis and exclude infection disease.[3]

Patients with UC mostly be found diarrhoea with blood, abdominal pain, and rectum bleeding, wherein Chron's patients usually occur diarrhoea and abdominal pain with higher chance to encounter systemic features as well as fatigue, fever, loss of appetite up to weight loss.[3] In This case report the diagnosis of UC were made by the history taking such as 1 week's history of diarrhoea with abdominal pain, fatigue and weakness since 6 day ago.

Laboratory testing is important for the diagnosis of UC. There are 2 reasons why laboratory data are required, the first reason is to discover the abnormalities in the hematology. The second reason is to support in monitoring disease activity. UC usually related with increased levels of leukocyte count, platelet count and low hemoglobin. Patients with anemia often found due to chronic bleeding.[5] In This Case report the patient had elevated leukocyte and normal haemoglobin due to negative bleeding.

UC stool examination mostly found a lot of red blood cells, eosinophils and pus cells. Patient also must perform a routine culture. Patients with negative pathogen with or without symptom more than 2 weeks are tend to have IBD. Usually, the pathogens that are tested are *Shigella, Salmonella, Campylobacter, Yersinia, Clostridium difficile*, and *Escherichia coli*.[6] In this case report the macroscopic stool laboratory showed watery stools with yellow colour and positive mucous. Whereas the miscroscopic stool showed white blood cells 14-15 / hpf and red blood cells 4-5/ hpf. This patient also received a stool culture test with negative *Escherichia coli*,

Salmonella and *Shigella* pathogen that increase the suspicion of IBD and appropriate for colonoscopy.

A typical colonoscopic are required to support the diagnosis of UC if the infectious disease evaluation have a negative outcome. In UC colonoscopy, the inflammation usually starts from the anal region towards the colon in a continuous and concentric way. The boundary among normal and inflammatory areas are is evident and can appear at a few mm apart, specifically in distal.[7,10]

The beginning signs of colitis are vascular pattern loss with edema and hyperaemia. In a severe inflammation, granulation of mucosal arise, the weakness of mucosal can be founded by the emergence of bleeding if it was swept away.[7]

In a severe UC, mucosal spontaneous bleeding and the presence of ulcers are present. Deep ulcer finding signifies a worse prognosis. In chronic diseases, the crease of the haustra vanish because the mucosal atrophy occurs. The mucosal atrophy also cause the narrowing of the lumen and developing pseudopolyps.[10] In this case report the colonoscopy examination revealed normal anus and many ulcus from rectum towards the descendent colon with the pathological finding showed vascular mucosa congestion along bleeding and edema, as well as infiltration of neutrophil.

The main objective of the therapy are to create and sustain the state of remission to increase the patient quality of life, decreasing long term requirement of steroid and reduce risk of cancer develop.[4] Majority of the patient shall experience recurrent attacks, but the remission period varied from a few months to some years.[8]

In the management of UC, nutrition plays an important role. Good nutrition choice can decrease the symptoms. The patient can have a dietary-changes such as avoiding vegetable, carbonated drinks, high fiber foods, and nuts. Eating smaller portion meals more often and drinking more liquid also reduce the symptom.[8]

Several people with precancerous cell, cancer and dysplasia in the colon need some surgery to medicate their UC. Patient with a complication such as bleeding, megacolon and no improvement in condition after treatment that are life threatening also need a surgery.[9]

Around 91% of patients can have an activity as usual even though the quality of life is decreased, but about 9-14% of the chronic symptoms are endure and the rest sustain an acute attacks which colectomy was needed.[8,9] In this case report the patient received treatment with oral sulfasalazine 3 times a day, 2 tabs each; intravenous paracetamol 1 gram TID; intravenous levofloxacin 750 mg OD; intravenous ondancentron 4 mg TID, intravenous esomeprazole 40 mg BID, intravenous methylprednisolone 62.5 mg BID.

CONCLUSION

UC is an inflammatory bowel disease with spreading colonic inflammation characteristics. UC is a disease with continuous unbridled inflammation in colon. UC can be diagnosed by history taking, physical examination, stool examination, colonoscopy and biopsy examination. These steps are conducted to confirm the diagnose of colitis and exclude infection disease. Therapy of UC must be adjusted to the severity of the disease, Surgery may be needed if tit was life threatening. Drugs used include glucocorticoid, amino-salisilat and other immunosuppressant such as Cyclosporine. The prognosis of the patient is quite good even though their quality of life often decreasing.

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