Colitis Amebiasis with Symptom of Occasional Dripped Anal Bleeding

Hadi Wandono

ABSTRACT

Colitis amebiasis is usually characterized by bloody and mucous diarrhea, abdominal pain and anal discomfort. However, there is unusual manifestation of colitis amebiasis, such as occasional dripped anal bleeding, which sometimes spouted. Therefore, we often do not suspect such symptoms for colitis amebiasis. Laboratory examination includes complete laboratory test, coagulation and hematologic test, ICT TBC and colonoscopy. The pathology anatomy examination reveals positive results of trophozoites. Treatment by using metronidazole tablet provides good result for this disease.

Key words: colitis amebiasis, colonoscopy, biopsy, trophozoite.

INTRODUCTION

Amebiasis is an infection caused by Entamoeba histolytica. It is commonly found in tropical and sub-tropical countries as well as low socio-economic areas. Entamoeba histolytica has trophozoite and cystic form. The trophozoite is invasive while the cystic form is infective. Human infection occurs when they ingest food and water contaminated by the amoeba cyst. In the colon, there is excystation, which produces trophozoites in the intestinal lumen. Colitis amebiasis results when the trophozoite penetrates the intestinal mucous layer. Invasion into intestinal wall is mediated by the killing of epithelial cells, neutrophils and lymphocytes. Colitis amebiasis is preceded by symptoms such as diarrhea, abdominal pain in the right abdomen quadrant, loss of appetite, fever, nausea, weight loss, and malaise with bloody and mucous diarrhea.

Hereby, we report a case of colitis amebiasis with manifestation of occasionally dripped anal bleeding, which sometimes spouted, in a 40 year-old male. This case is reported because the manifestation was not typical, thus there was no suspicion for colitis amebiasis.

CASE ILLUSTRATION

A Javanese Moslem, 40 year-old male employee came to Haji Surabaya Indonesia General Hospital in July 2006 and complained about dripped anal bleeding which sometimes spouted since 10 months ago. There was no history of abdominal pain, tenesmus ani, fever or mucous diarrhea. The patient had come to a private hospital in Surabaya, but there was no improvement until 10 months later.

Physical Examination

The patient was fully alert, well nourished, pale, no jaundice, no dyspnea or cyanosis. His blood pressure was 120/80 mmHg and pulse rate was 100x/minute, which was regular with adequate filling. The axillary body temperature was 36.5° C and respiratory rate was 20x/minute. The head examination revealed no jaundice and minor pallor in conjunctiva. The examination of neck region showed no enlargement of thyroid gland and lymph nodes. The chest, heart and lungs examination were within normal limits. Abdominal examination revealed normal result, the liver and spleen were not palpable. The upper and lower extremities showed no enlargement of lymph nodes. There were normal physiologic reflex and no pathologic reflex occurred. The genitalia examination revealed normal result.

Laboratory Examination

The results of complete blood test on 30 July, 2006 were as follows: hemoglobin 11.6 g/dL, erythrocytes 5.57 mill/uL, hematocrit 34.9%, MCV 74.2 fL, MCH 24.8 pg, MCHC 33.4%, RDW 14.3%, leukocytes 9500/mm³. Diff count -/-/1/89/6/4, platelet 419000/uL, ESR 10-15 mm/h, bleeding time 1.5 min, clotting time 9 min, PTT 13.0 C 12.0 s, APTT 29.8 C 34.5 s, sodium 15 mmol/L, potassium 4.23 mmol/L, calcium 2.31 mmol/L, clot retraction ±1 hour. Complete stool examination, amoeba serologic test and ICT TBC examination were not performed.
DISCUSSION

Colitis amebiasis is preceded by ingesting infectious protozoa *Entamoeba histolytica* through food, vegetables and water. Most of *Entamoeba histolytica* has cystic form because it is resistant to gastric acid. In the colon, there trophozoites are produced from the cyst. In the ileum, mediated by trypsine enzyme, the cyst produces trophozoites, damages colon wall, and creates a cavity that consists of mucous, cell debris, and trophozoites. This process stimulates the colon and causing diarrhea. Trophozoites are excreted along with stool and mixed with mucous and erythrocytes. The excreted cyst attaches on sand, grass, vegetables and fruits. The cyst may spread into other organ such as liver, lungs, brain, or spleen, through the blood vessels.\(^3,4\)

Amebiasis is frequently found in tropical and poor countries, where sanitation are poor. It may spread to liver (5-10%), lung abscess (1-2%), and brain (<1%). It is more frequent in young adult than elderly or children.\(^1,2\)

Complications of intestinal amebiasis include:\(^1,2,5\)
1. Severe dehydration, hypovolemic and electrolyte imbalance
2. Acute intestinal bleeding and anemia
3. Toxic colon dilatation (toxic megacolon)
4. Perforation and peritonitis
5. Ameboma

Protozoa infection of *Entamoeba histolytica* mainly affects altered defeation. Some parts of colon will be affected and usually is segmental. It usually affects the right side of colon and caecum, followed by left colon and rectum. Colon amebiasis may mimic Crohn’s disease and ulcerative colitis. There are variable signs and symptoms, starting from asymptomatic to acute and severe diarrhea accompanied by severe bleeding, abdominal cramping, and tenesmus ani. Most patients have no symptom or only have mild symptoms.\(^4\)

Colonoscopy in acute infection phase reveals diffuse granulation, which is similar to ulcerative colitis. Chronic amebiasis in 80-90% patients involves caecum area and presents an ulcer with poor/necrotic ulcer base with normal adjacent mucosa. Sometimes, colitis amebiasis forms a pseudo polyp and an amebic ulcer covered with redrim. This may assist the endoscopist to differentiate colitis amebiasis with Crohn’s disease. Biopsy is performed along the edge of ulcer because there are a lot of trophozoites.\(^3,6,7\)

Some amebiasis cases show connective tissue reaction on the intestinal lumen and the intestinal mucosa, which is subsequently altered into granulomatous...
tissues. On palpation, the granulomatous tissue is felt as a segmental abdominal mass in narrowed colon, which is known as ameboma. Colonoscopy examination reveals ameboma as an ulcerative polyp with irregular shape.\textsuperscript{3, 6, 8}

Intestinal amebiasis may be fully recovered but in some cases, it may mimic Crohn’s disease and may be treated with corticosteroid. This may be caused by misdiagnosis.

**Diagnosis**
- Stool examination to evaluate the presence of cyst or trophozoites.
- Biopsy in necrotic area by using colonoscopy
- Stool culture to obtain cyst and trophozoite
- Blood examination, which may reveal other infection through leukocytosis and abnormal liver function test.
- Abdominal ultrasonograph if there is suspicion of liver abscess
- Serologic test: sero amoeba with 82-98% positive result of indirect haemaglutination test in the patient.\textsuperscript{1, 2, 5}

**Treatment\textsuperscript{1, 2, 5}**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dosage</th>
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<tbody>
<tr>
<td><strong>Amebic liver abscess</strong></td>
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<tr>
<td>Metronidazole</td>
<td>750 mg orally 3 times a day for 7-10 days</td>
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<tr>
<td>Tinidazole</td>
<td>8000 mg orally 3 times a day for 5 days</td>
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<tr>
<td>Paromomycin</td>
<td>25-35 mg/kg/day, 3 divided doses for 7 days</td>
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<tr>
<td>Diloxanide Furoate</td>
<td>500 mg orally 3 times a day for 10 days</td>
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<tr>
<td><strong>Amebic colitis</strong></td>
<td></td>
</tr>
<tr>
<td>Metronidazole</td>
<td>750 mg orally 3 times a day for 7-10 days</td>
</tr>
<tr>
<td><strong>Asymptomatic intestinal colonization</strong></td>
<td></td>
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**CONCLUSION**

In this case we report, an adult patient without typical symptoms of colitis amebiasis, but only with symptom of dripped anal bleeding, which sometimes spouted, without mucous or diarrhea. Therefore, we did not suspect such symptoms for colitis amebiasis, so the stool examination and sero amoeba test were not performed. We only performed colonoscopy and biopsy in the necrotic area on caecum. The pathology anatomy examination revealed positive result of trophozoites. The diagnosis was colitis amebiasis. A 500 mg oral metronidazole treatment, three times a day, was given for 10 days. The bleeding stopped after 5 days of treatment.

**REFERENCES**