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= Abstract =

**A Case of Primary Systemic Amyloidosis Presenting Submucosal Hematoma and Bleeding in the Lower Gastrointestinal Tract**

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A case of systemic amyloidosis involving the upper and lower gastrointestinal tract is presented. The initial manifestation of this case was bloody diarrhea. On colonoscopy, multiple submucosal hematomas and irregular ulcerations of the sigmoid and descending colon were found. The pathologic diagnosis was confirmed by an endoscopic mucosal biopsy of the gastrointestinal tract and the specimen revealed massive amyloid deposits in the wall of the upper and lower intestinal tract. With intensive medical treatment, the submucosal hematoma disappeared and the ulcerations decreased in size. However, on the 29th day, the patient was expired due to unexpected sepsis. (**Korean J Gastrointest Endosc 19: 829-833, 1999**)

**Key Words:** Amyloidosis, Submucosal hematoma, Gastrointestinal bleeding

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.12)

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45)  
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.67)  
colchicine, steroid  
89) 5 20%  
.10)

mm/hr, CRP 2.77 mg/dL, 2-MG 7.9 mg/L ,  
albumin 2.92 g/dL, 1-globulin  
0.36 g/dL, 2-globulin 0.45 g/dL, -globulin 0.56  
g/dL, -globulin 0.57 g/dL .  
IgG 586 mg/dL, IgA 106 mg/dL, IgM 73  
mg/dL, -light chain 145 mg/dL, -light chain 63  
mg/dL .  
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1).

(Fig.

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(Fig. 2).

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36.1°C, 90 / , 130/70 mmHg,  
20 / , 162 cm, 54 kg

(Fig. 3A).

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(Fig. 3B).

: 8,500/mm<sup>3</sup>

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11.7 g/dL, 196,000/mm<sup>3</sup> ,

4.9 g/dL, 2.9 g/dL,

가

0.9 mg/dL, AST/ALT 19/12 IU/L ,

BUN/Cr 40.5/4.4 mg/dL , 24

(Fig. 4A).

Congo red

2,135 mg .

Bence-Jone's protein . ESR 10

(globule)

**Fig. 2.** Barium enema. The barium enema revealed ulcerations, multiple filling defects and luminal narrowing with nodular and thickened mucosa involving sigmoid and descending colon.

(Fig. 4B).  
 : prednisolone 1 가  
 30 mg 15 S 가  
 (monoclonal antibody (fibril)  
 가 light chain)  
 (Fig. 5). 29 . 가  
 transthyretin  
 A  
 .11)  
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- 1) Symmers WSC: Primary amyloidosis. *J Clin Pathol* 9: 187, 1956
- 2) Dahlin DC: Secondary amyloidosis. *Ann Intern Med* 31: 105, 1949
- 3) Seliger G, Krassner RL, Beranbaum ER, Miller F: The spectrum of roentgen appearance in amyloidosis of the small and large bowel: radiologic-pathologic correlation. *Radiology* 100: 63, 1971
- 4) , , , , , , : 가 amyloidosis 1 . 13: 375, 1993
- 5) Battle WM, Rubin MR, Cohen AS, Snape WJ Jr: Gastrointestinal motility dysfunction in amyloidosis. *N Engl J Med* 301: 24, 1979
- 6) , , , , , , : 1 . 52: 72, 1997
- 7) Levy DJ, Franklin GO, Resenthal WS: Gastrointestinal bleeding and amyloidosis. *Am J Gastroenterol* 77: 422, 1982
- 8) Kyle RA, Greipp PR: Primary systemic amyloidosis: comparison of mephalan and prednisone versus placebo. *Blood* 52: 818, 1978
- 9) Ravid M, Robson M, Kedar I: Prolonged colchicine treatment in four patients with amyloidosis. *Ann Intern Med* 87: 568, 1977
- 10) Kyle RA, Greipp PR: Amyloidosis (AL): clinical and laboratory features in 229 cases. *Mayo Clin Proc* 58: 665, 1983
- 11) Falk RH, Comenzo RL, Skinner M: The systemic amyloidoses. *N Engl J Med* 337: 898, 1997
- 12) Cohen AS: Amyloidosis. *N Engl J Med* 277: 522, 1967
- 13) Carlson HC, Breen JF: Amyloidosis and plasma cell dyscrasias: gastrointestinal involvement. *Semin Roentgenol* 21: 128, 1986
- 14) Chapple CR, Chesner IM, Newman J: Multiple myeloma presenting as intractable gastric retention in a patient with a previous gastroenterostomy. *Br J Surg* 73: 930, 1986
- 15) Vernon SE: Amyloid colitis. *Dis Colon Rectum* 25: 728, 1982
- 16) Yood RA, Skinner M, Rubinow A, Talarico L, Cohen AS: Bleeding manifestations in 100 patients with amyloidosis. *JAMA* 249: 1322, 1983
- 17) Kapp JP: Hepatic amyloidosis with portal hypertension. *JAMA* 191: 497, 1965
- 18) Yoshida T, Kanbe H, Haraguchi Y, Sakamoto A, Iwashita T, Tanaka K, Katsuki T: Submucosal hematoma producing mechanical obstruction in the sigmoid colon, complicated by systemic amyloidosis. *Endoscopy* 15: 277, 1983
- 19) , , , , , , : amyloidosis. 25: 1025, 1982
- 20) Tada S, Iida M, Iwashita A, Matsui T, Fuchigami T, Yamamoto T, Yao T, Fujishima M: Endoscopic and biopsy findings of the upper digestive tract in patients with amyloidosis. *Gastrointest Endosc* 36: 10, 1990

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**Fig. 1.** Esophagogastroduodenoscopy. The gastric mucosa was edematous, erythematous and friable. The gastric folds on the greater curvature side of the body were enlarged and coated with white-yellow exudate.

**Fig. 3.** Initial colonoscopic finding. (A) There were multiple irregular discrete ulcerations coated with whitish exudate in the sigmoid colon. The mucosa surrounding the ulcers showed edema and friability. The lumen of the bowel was stenotic. (B) There were several red-colored elevated lesions with bleeding in the descending colon suggesting submucosal hematomas.

**Fig. 4.** Pathology. Colonoscopic biopsy shows amorphous, homogeneous and eosinophilic deposit in lamina propria and submucosal layer (A) (H&E  $\times 100$ ). Polarizing microscopic examination of biopsy specimen reveals green birefringence (B) (Congo red  $\times 200$ ).

**Fig. 5.** Follow-up colonoscopic finding. Two weeks after the treatment with steroid, follow-up colonoscope revealed that the size of the ulcer decreased and the mucosal edema disappeared but the lumen of bowel was still narrow.

