Treatment of Bleeding Angiodysplasia in the Left Colon by Endoscopic Sclerotherapy

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Angiodysplasia of the bowel is a rare, but important cause of recurrent occasionally severe gastrointestinal bleeding (1). Diagnostic angiography and fiberoptic colonoscopy enabled physicians to identify these lesions more easily and provided an opportunity for nonsurgical therapy (2,3). Nonsurgical therapeutic methods include selective arteriographic embolization (4), endoscopic therapy such as monopolar and bipolar electrocoagulation (3,5), Argon and Yag laser photocoagulation (6), and sclerotherapy (7). To our knowledge, although sclerotherapy has been used recurrent upper gastrointestinal bleeding, treatment of the bleeding colon angiodysplasia by endoscopic sclerotherapy has not been previously. Thus we present a patient with lower gastrointestinal bleeding from angiodysplasia in the left colon near the splenic flexura who was successfully treated by sclerotherapy.

Case Report

A 65-yr-old women was hospitalized in March 1992 with hemotochezia, weakness and palpitation. She had a prior history of hematochezia and blood transfusion three months ago. There was no history of peptic ulser disease, alchol abuse, a family history of bleeding and any madications.

Physical examination revealed a pale weak appearing women. She had a murmur of aortic stenosis and mild hypertention (160/90 mmHg). Hemoccult positive stool was detected on rectal examination. Admission laboratory studies revealed a normal chest x-ray, electrolytes, renal functin tests and liver function tests. Upper gastrointestinal endoscopy showed only superficial antral gastritis. Abdominal ultrasonography, upper gastrointestinal series, barium enema and proctoscopy were normal. Hemoglobin level was 9.8gr/dl. Colonoscopy was performed with Olympus CF 10 L colonoscop and seen bleeding angiodysplasia in the left colon near the splenic flexura (Figure 1). We decided endoscopic sclerotherapy. Polidocanol 1% (Aethoxysclerol 1%) was used to be sclerozan agent. Sclerotherapy was performed with Variject sclerotherapy needle which had 23 gauge, 4mm length of needle size, sheath O.D 1.8mm and working length 200cm. Total 8 ml polidocanol was injected different point of angiodysplasia until all vascular tissue disappeared. The bleeding ceased during treatment. One week later colonoscopy was repeated and seen a minute ulcer area of angiodysplasia (Figure 2). Control hemoglobin level was found 11.7 gr/dl. The patient was discharged and invited one month later. This time colonoscopy was found normal and hemoglobin level was 12.5 gr/dl.

Discussion

Angiodysplasia of the gastrointestinal tract are irregularly shaped clusters of atretiel, venous and capillary vessels located in the submucosa (8). These lesions are most often found in the right colon and ceacum, but may occur throughout the gastrointestinal tract. It is in increasingly recognised etiology of gastrointestinal bleeding. It was the most frequent etiology of recurrent bleeding. The factors associeted with it are chronic renal

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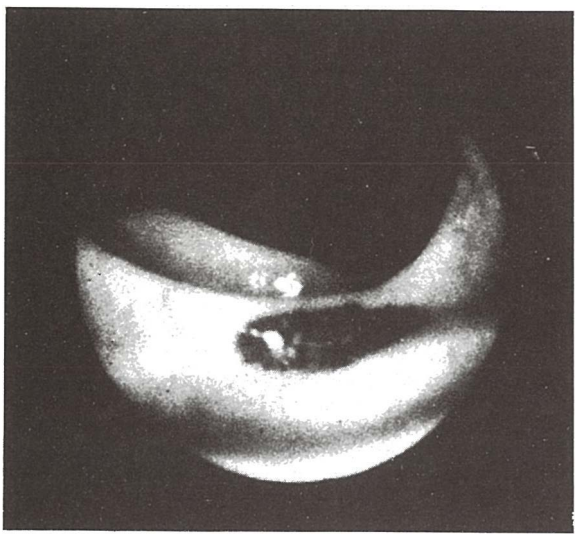

Figure 1: Angiodysplasia in the left colon near the splenic flexura (pretreatment)

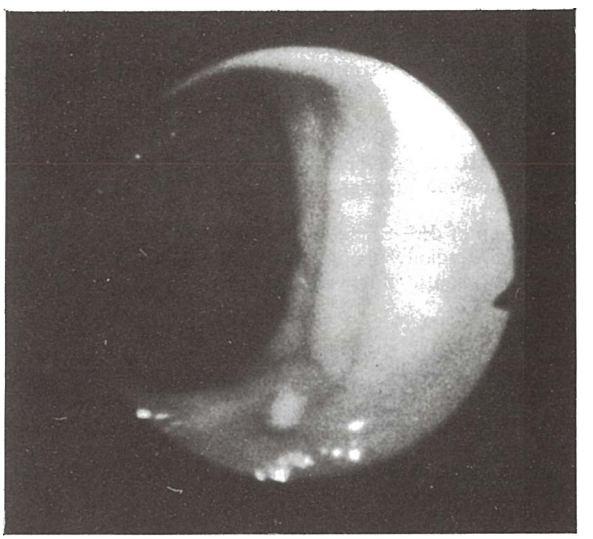

Figure 2: A minute ulcer area of angiodysplasia after sclerotherapy

failure, age, valcular heart disease and cirrhosis.

Surgery (9,10) and endoscopic therapy have been used for treatment of angiodysplasia. Endoscopic therapy is included electrocoagulation with mono and bipolar electrocautery and heater probe, laser photocoagulation and sclerotherapy (4-7). Endoscopic sclerotherapy has been used recurrent upper gastrointestinal bleeding from angiodysplasia (7). It has not been used for treatment of lower gastrointestinal bleeding from angiodysplasia of colon previously reported. We have successfully treated our patient by endoscopic sclerotherapy. Because the ceacum has a thin walled structure endoscopic therapies for these lesions may occur a significant risk of perforation (11). Rutgeerts et al. reported two patients with a free caecal perforation whose have been treated by Neodmium Yag Laser photocoagulation and they found treatment was successful in 82% of the 49 patients (6). Richter et al. showed 31 patients were treated surgically. There were no complications or deaths as a result of surgery. Rebleeding rate 16% was observed after one year (3). They treated by electrocoagulation in 15 patients. One patient suffered perforation of the colon, required an operation and recovered. Rebleeding occured in 34% within one year (3). They found no statistically significant difference in the incidence of recurrent bleeding among the endoscopically, medically and surgically treated. Because high rate of rebleeding is suggested treatment by oral contraceptive (8,12-14). Cutsem et al. treated ten patients with frequent and severe bleeding from gastrointestinal vascular malformations took part in a double blind, placebo controlled, crossover trial of a daily dose of 0.05mg ethinilestradiol plus 1mg norethisterone given by mouth. Two of ten patients, which took estrojen progesteron, required transfusion, whereas all patients took placebo required transfusion (11). Our patient was not received estrojen progesteron because she had single angiodisplasia and has not high bleeding frequency and required high transfusion. Endoscopic sclerotherapy can use safe for treatment of bleeding angiodysplasia less than four number (3). But to be carefully and don't inject concentrate sclerozan agent and more amount. It is a cheap method and don't required an electrosurgical unit.

We suggest that endoscopic sclerotherapy may be a method of choise for eliminating or reducing bleeding risk from colon angiodysplasia.

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