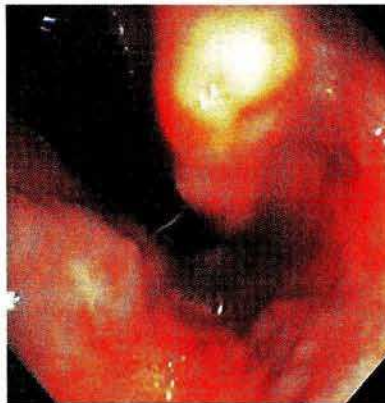
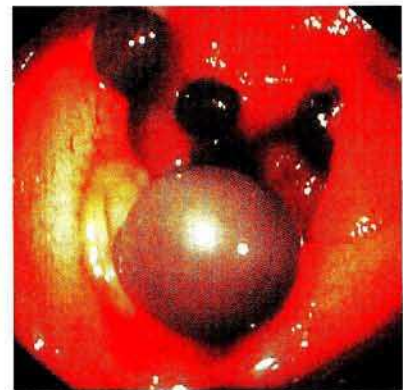


### Endoscopic Ligation for Bleeding Rectal Varices in a Child with Primary Extrahepatic Portal Hypertension

A 13-year-old boy was admitted to our hospital because of rectal bleeding. He was 137 cm tall and weighed 37.5 kg (like an average eight-year-old Japanese boy). He had been diagnosed as having primary extrahepatic portal vein obstruction (EHPVO) when he was three years old. He underwent sclerotherapy for esophageal varices four times between two to four years after diagnosis of EHPVO. Sigmoidoscopy revealed three huge, tortuous rectal varices arranged perpendicular to the Houston rectal fold and extending 10 cm from the anus (Figure 1). The red bleeding spot, similar to the red color sign of esophageal varices, was found in the ridge of one varix which had a white color, was thin and protruding. Endoscopic variceal ligation (EVL) was performed on three rectal varices. Ligation was repeated from the proximal to the distal ends, and two bands were placed on two blue varices and three bands were placed on one white varix. No immediate complications occurred. A repeat sigmoidoscopy three days later showed bleeding from the edge of the post-EVL ulcerations that was the result of the detachment of the band and the entrapped mucosa (Figure 2). However, sigmoidoscopy 20 days later showed complete resolution of the varices and healing ulcers without any evidence of bleeding. In addition, sigmoidoscopy 72 days later showed multiple scars of post-EVL ulcers (Figure 3). There have been no recurrent bleeding



**Figure 1** Retroflex endoscopic view of rectum before ligation. Markedly dilated varices can be seen in the rectum. Internal hemorrhoids are not seen in the anus and rectum



**Figure 2** At three days after ligation black necrotic mucosa with hemorrhage can be seen at the site of ligation

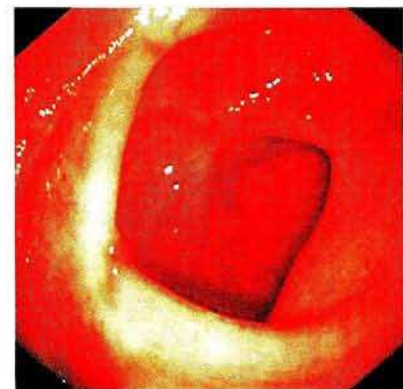
episodes over a follow-up period of 13 months.

It is well known that endoscopic sclerotherapy is an effective method for controlling bleeding from rectal varices [1,2]. However, a case where sclerotherapy was ineffective has been reported [3]. Two reports [4,5] so far have shown EVL therapy to be effective in controlling bleeding from rectal varices. EVL for rectal varices appears to be a safe and effective therapy, even in children.

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**Figure 3** At 72 days after ligation multiple scars can be seen in the rectum

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