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SHORT COMMUNICATION

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Peroperative enteroscopy

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Current diagnostic alternatives for lesions of the small intestine are sometimes insufficient. Peroperative enteroscopy is presented as a useful method to identify and treat intestinal polyposis and angiodysplasias that can not be found by other methods. This technique was used on two patients. In both cases, this procedure was helpful and the appropriate treatment successfully completed.

UNITERMS: Endoscopy - peroperative, intestinal bleeding, intestinal tumor, polyposis, angiodysplasia.

INTRODUCTION

Upper gastrointestinal (GI) endoscopy and colonoscopy are well-established diagnostic and therapeutic methods for diseases of the esophagus, stomach, upper duodenum and colon. However, pathologic conditions of the small intestine may be difficult to diagnosis.

GI series classically identify larger intestinal tumors, strictures or dilatations. Arteriographies and scintigraphies are able to show active bleedings. CT scans and ultrasound are very useful to verify the presence of larger neoplasms. But even with all these methods, some diseases, such as angiodysplasias without active bleedings or small tumors, cannot be diagnosed. The enteroscope is helpful to complete the investigation of the small bowel, but it is very expensive, and only few medical centers may maintain this kind of panendoscope.

The present communication describes an efficient method to precisely identify small bowel diseases: peroperative enteroscopy. This procedure was helpful in two patients.

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CASE REPORTS

Through a small median supra-umbilical laparotomy, the middle part of jejunum is identified. A 2-centimeter jejunotomy is performed and a panendoscope is introduced and advanced into the proximal jejunum (Fig. 1). The endoscope must be previously cleaned with iodinate solution.

The small bowel is rucked up over the endoscope that reaches the upper duodenum. Then, by injecting air, it is possible to observe the internal part of the intestine. The transillumination obtained with the endoscope light permits a direct external view of the enteric wall. After aspirating the air, the endoscope is slowly withdrawn, and new intestinal segments are seen. Following a complete study of the duodenum and upper jejunum, the endoscope is advanced into the distal jejunum and ileum, which are rucked up over it. The process described above is used to assess the rest of the small bowel. At the end of the procedure, the jejunotomy site should be cleaned with topic iodinate solution.

This technique was successfully employed in two patients. An 18-year-old man was diagnosed as having Peutz-Jeghers syndrome with severe anemia and partial jejunal obstruction due to intestinal polyps. The jejunum was open at the site of the obstruction, 20 centimeters after

Figure 1 - The endoscope (arrow) being introduced into the jejunum.

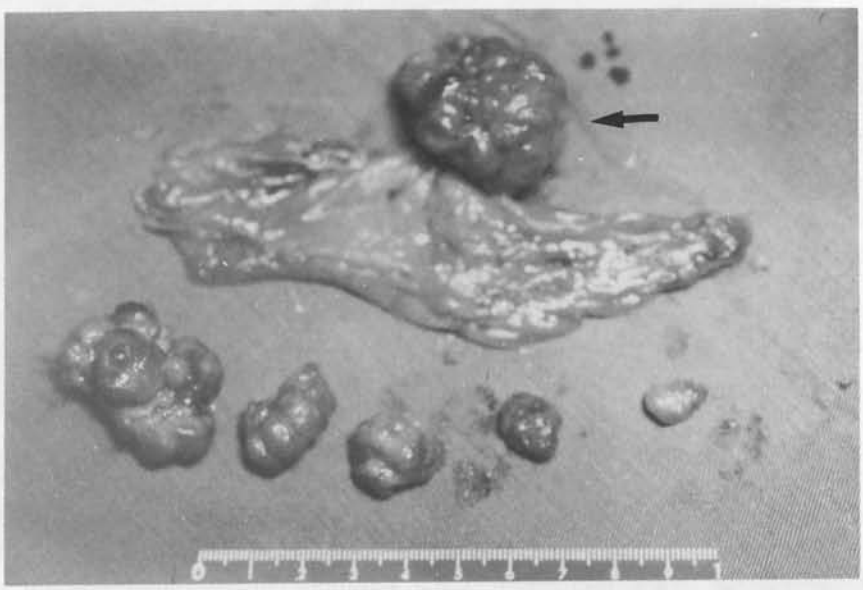

Figure 2 - Peutz-Jeghers polyps of jejunum and ileum removed endoscopically. Observe the large polyp (arrow) that was removed along with a segment of jejunum.

the ligament of Treitz. A large polyp was withdrawn, along with part of the surrounding jejunum. The endoscope was advanced through the proximal jejunum and duodenum. Six polyps were found and endoscopically removed. The endoscope was withdrawn and then advanced into the distal jejunum and ileum. Three other polyps were identified and excised (Fig. 2).The patient had an uneventful postoperative recovery, and his hemoglobin was normal in two weeks.

The second patient was an 18-year-old woman with angiodysplasias and severe anemia. She was previously submitted, during an eight-year period, to GI series, enemas, upper endoscopy, colonoscopy, angiography, scintigraphy, ultrasound and CT scan of the abdomen without identification of the bleeding source. Following the procedure described above, the site of the bleeding was found in the middle jejunum, and she was successfully treated (Fig. 3).

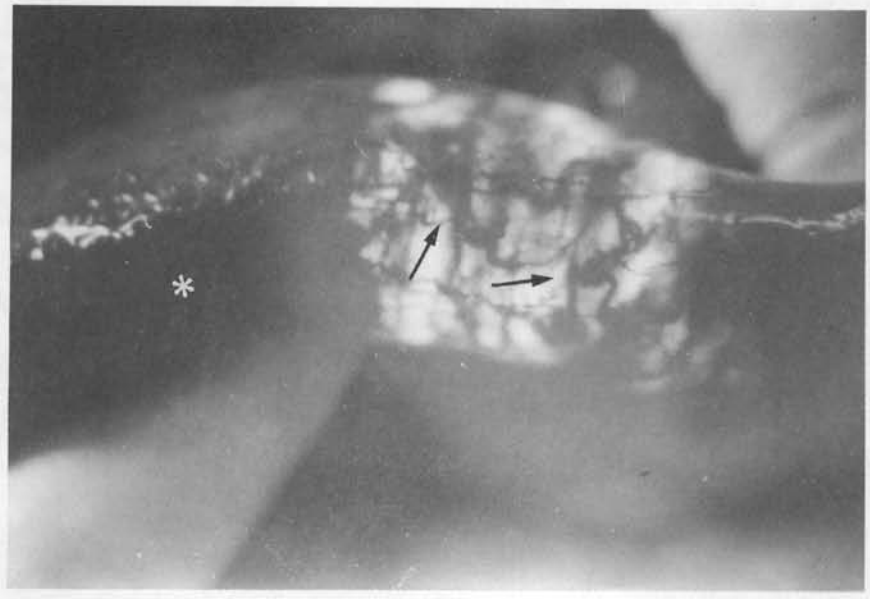

Figure 3 - Identification of angiodysplasias (arrow) through the transillumination obtained form the light of the endoscope introduced into the jejunum.

DISCUSSION

We used peroperative endoscopy to identify polyps in a patient with Peutz-Jeghers syndrome, and bleeding intestinal angiodysplasias in another patient. Their treatments were precisely performed. This method is simple and can be easily carried out in most hospitals without special training. The endoscope is the same as that routinely employed in upper GI endoscopies, but colonoscope may be also used for this procedure.

We believe that it is worthwhile to consider this method to diagnose and eventually treat intestinal lesions that cannot be identified by other techniques.

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RESUMO

As alternativas diagnósticas atuais para lesões do intestino delgado são eventualmente insuficientes. A enteroscopia peroperatória é apresentada como um método útil para identificar e tratar poliposes e angiodisplasias intestinais que não podem ser localizadas através de outros métodos. Essa técnica foi utilizada em dois pacientes. Em ambos os casos, o procedimento auxiliou para que se pudesse proceder, com sucesso, ao tratamento adequado.