ENDOSCOPIC POLYPECTOMY FOR THE REMOVAL OF POLyps OF THE SMALL INTESTINE

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Summary

Since intussusception is a common complication of the Peutz-Jeghers polyps, laparotomy should be recommended to remove them. However, all of them will not be palpable or discernible during laparotomy. Operative endoscopy was employed for removing polyps of the small intestine of a 22-year-old female who was previously diagnosed as Peutz-Jeghers syndrome. Using a newly designed enteroscope with two channels (SIF-2C, Olympus), four large polyps over 1 cm in size were removed from the ileum and jejunum with safety.

Endoscopic polypectomy is one of the rapidly advancing fields and widely spread methods in gastrointestinal endoscopy since the introduction of electrosurgical techniques. Although the endoscopic removal of polyps arising from the esophagus, stomach, duodenum, colon and rectum can be performed with ease and safety, polypectomy for the polyps of the small intestine has never been performed because of the technical difficulties to handle the scope in the small intestine. Two channel enteroscope resolved this problem. Therefore, it is emphasized that double channel enteroscope makes the polypectomy in the small intestine possible and the indication of enteroscopy will be more widely extended.

Key Words: enteroscopy, two channel enteroscope, endoscopic polypectomy.

Intussusception and malignant change are the common complication of the Peutz-Jeghers polyps\(^1\). Endoscopic polypectomy is useful and indispensable for the prevention of malignant change of polyps in the stomach and large intestine. However, regretfully we have had no effective procedure for removing polyps in the small intestine where incidence of intussusception is much higher. There are several reasons why small intestinal polyps are not well treated.

Peutz-Jeghers polyps are scattered in the long intestine and all polyps cannot be resected at once during laparotomy. Moreover, endoscopic polypectomy of small intestinal polyps has been impossible because of the technical difficulties of enteroscopy.

Recently, endoscopic polypectomy was performed for the removal of small intestinal polyps in a patient with Peutz-Jeghers syndrome using a newly designed two channel enteroscope. In this paper, we would like to discuss about the usefulness of the electrosurgical removal of the Peutz-Jeghers polyps in the small intestine.

Case Report

A 22-year-old female with pigmentation on
the lips, around the mouth, in the buccal mucosa and on the extremities was admitted to our hospital complaining of abdominal colic pain and vomiting. Partial ileostomy was performed for intussusception due to big polyps. On the microscopic examination, polyps were hamartomatous. Typical branching cores of muscular tissue derived from the muscularis mucosae were inspected. Each core was covered by histologically normal epithelium with a normal lamina propria. No nuclear hyperchromatism nor glandular irregularity as in a adenoma was revealed in these polyps, so that they were diagnosed as Peutz-Jeghers polyps (Fig. 1).

Barium meal study after operation revealed small polyposis scattering in the ileum and jejunum (Fig. 2). Endoscopic polypectomy was applied removing polyps of the small intestine by a newly designed enteroscope, type SIF-2C (Olympus) (Fig. 3). SIF-2C has two channels which are 2.8 mm and 2.0 mm in inner diameter respectively. SIF-2C was introduced into the small intestine as the conventional rope-way method. Two days before the examination, a slender teflon tube (intestinal string) was swallowed. After the passage through the gastrointestinal tract of the subject, the string was passed through one of the biopsy channels of the enteroscope. SIF-2C was inserted slowly into the intestine of the subject per-orally under general anesthesia. After introduction the scope into the terminal ileum, the scope was pulled out slowly without losing the string...