

Crisis Management Resection of Colorectal Polyps

By: Pin-Chao Wang, Attending Physician, Dept. of Gastroenterology,
Taipei Tzu Chi General Hospital



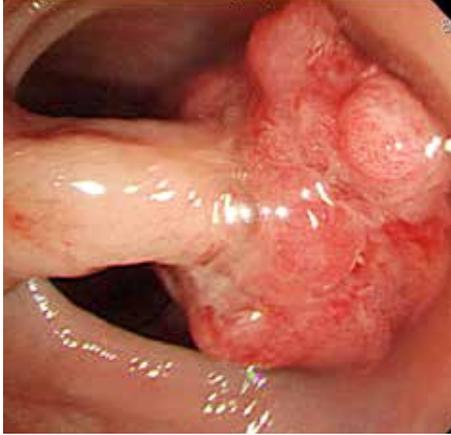
Dr. Pin-Chao Wang explains to patients the operating mechanism of the gastrointestinal tract.

The westernization of diet in the recent years gradually increased the incidence of colorectal cancer, elevating it to one of the common cancers among developed countries. Although many advanced medical devices and pharmaceutical products have been produced, but still, a considerable number of patients died from colorectal cancer. Curative therapy to colorectal cancer is surgery, and the key to determine whether the prognosis is good or bad is decided by early diagnosis through colonoscopy. As a result, it would be ideal if you can find colorectal cancer early, or identify and treat the predecessor of cancer early. Many people have heard of “colon polyp”, the predecessor of the colon cancer, but what exactly are polyps? What is the connection between polyps and cancer? Through the following case, we should have a deeper understanding of the criticality of colorectal polyps and its treatment.

A sixty-year-old Mr. Wang had no signs of bloody stool, change in bowel habits or weight loss. In year 2012, through the National Health Council menstrual cancer-screening test, he was found positive in fecal blood reaction, and was referred to Taipei Tzu Chi Hospital gastroenterology for colonoscopy to confirm the presence of lesion. Endoscopic findings showed a 2.5 cm of the petiole protruding polyps in Mr. Wang’s descending colon. After a polyp resection, the specimen was sent to pathology, and the result is benign adenomas, but at the same time, the front end of the polyp has developed localized adenocarcinoma, the early stage of colorectal cancer. Fortunately, the edge of the resected polyps root showed no manifestation of cancer, and furthermore, the CT scan showed no sign of local or distant metastases. Colonoscopy and imaging during outpatient follow-up also cleared any sign of cancer recurrence. The patient’s health condition remained health to this day.

Tiny Illegible Polyps – Criticality to Cancer Prevention

The so-called colon “polyp” is a collective term for protrusion on the colon walls, an abnormal colonic mucosa hyperplasia formation. Small polyps usually do not have symptoms, but large polyps may cause bleeding. Some polyps can cause intestinal obstruction, nausea, vomiting, abdominal pain and other phenomena. Common colorectal polyps can be



The image shows the appearance of colorectal polyps under a colonoscope during colonoscopy exam. The result shows it as a handle of colorectal polyps' appearance.



Trap the root of polyps with thermal steel ferrule and resect it via heat conduction.

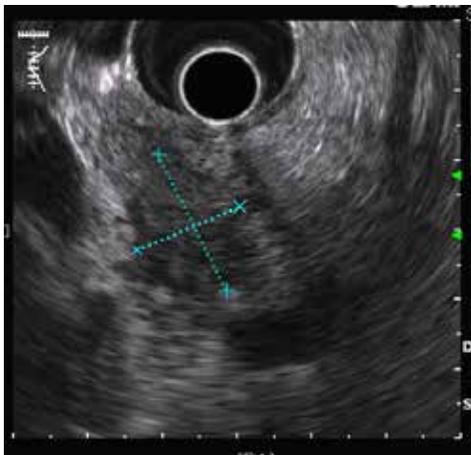
divided into “hyperplastic polyps” and “adenomatous polyps.” Hyperplastic polyps are usually tiny mucosal protrusions, often less than 0.5 cm, and do not become malignant. This small mucosal protrusion and surrounding mucosa are usually the same color or slightly pale. Hyperplastic polyps may occur in isolation, or may also exist in groups with other polyps inside the large intestine, which made it hardly distinguishable whether they are hyperplastic polyps or adenomatous polyps. As a result, we often rely on biopsy or polypectomy in pathological examination for identification. For adenomatous polyps, canceration may occur years later, according to the large-scale medical research. Hence, it can be regarded as the predecessor of colorectal cancer. Clinically speaking, it should be removed as early as possible.

Thermal Resection with Wire Ferrule – Specimen Tested to Ensure Safety

There are many ways to remove colorectal polyps. If polyps are still small, it can be removed with forceps. However, for larger polyps, colonoscopic polypectomy is essential. However, for colonoscopic

polypectomy to perform well, an essential prerequisite is the cleanliness of the large intestine, in order to observe the polyps and surrounding mucosa changes with obstructions. The whole process can be completed under the endoscopic. Common polyp resection uses thermal ferrule wire in operation. The polyp is first trapped with the instrument near the best position to resection - between the surface of the polyp and the pedicel junction. A distance from the gastrointestinal wall must be maintained in order to avoid the introduction of heat to the wall and risking perforation. Once the thermal wire ferrules traps the polyps, the ring is slowly tightened with heat conduction, which would then resect the root and extract the polyp.

Not only can colonoscopic polypectomy prevent the canceration of polyps, it can also eliminate and root the polyps that are early colorectal cancer. The whole operation can be done by endoscopy without the risk of anesthesia and the pain of surgery. The majority of patients does not need hospitalization, and are able to resume normal work and life with little recovery time.



The Division of Gastroenterology and Hepatology at Taipei Tzu Chi Hospital makes integrated efforts to take good care of people's health. The image shows the position of a tumor near the top of pancreas.



Photo depicts Dr. Tsung-Hsien Hsiao uses the endoscopic ultrasound to discover any detail sign of tumor cells in pancreas and gall.