

## LAPAROSCOPIC WEDGE RESECTION OF THE CECUM, ASSISTED BY COLONOSCOPY

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### 〈ABSTRACT〉

Colonoscopic-assisted laparoscopic wedge resection allows complete excision of moderate-sized colonic masses which cannot be safely removed by colonoscopy. This approach appears safe and spares selected patients on open resection.

### Introduction

The chief advantage of an endoscopic surgical technique is the avoidance of laparotomy. Beck and Krauf reported safe removal of big sessile polyps with the aid of a combined endoscopic and laparoscopic technique. The combined approach readily enables identification of a perforation in bowel wall.

Nevertheless, in some cases of sessile polyps and hemangiomas of moderate size, endoscopic removal may result in only partial excision of the lesion and may hence be inadequate or indeed dangerous with the risk of postoperative bleeding and perforation 2-4 perforation. Resection of a wedge of bowel incorporating the lesion is an alternative which offers the prospect of complete removal of the lesion and consequently full histopathologic assessment. This report describes successful laparoscopic resection of a wedge of cecum containing a 2×3cm submucosal mass, in a 56 year old man

### Technique

The patient was placed in the lithotomy position under general anesthesia. After pneumoperitoneum

was established, three ports(Figure 1) were placed and laparoscopic exploration performed. No abnormality was noted in the cecum by laparoscopy. The colonoscope was then guided and monitored by laparoscopy. A mass in the anterolateral wall of the cecum was located by colonoscopy. The extent of the mass was mapped by laparoscopic

Endoclips(Autosuture, Norwalk, CT), placement of which was guided by indentation of bowel wall by colonoscopic biopsy forceps. The wedge of cecum to be resected was then grasped by Endo Babcock clamps(Figure 2) and wedge resection achieved by two applications of a 35mm Endo GIA instrument(Autosuture, Norwalk, CT). The entire resection was also viewed through the colonoscope. Following wedge resection, the lumen of the cecum was noted to be slightly narrowed but enabled passage of the colonoscope.

The specimen was removed via the port site incision in the right lower quadrant. Histology of a frozen section did not reveal malignancy. The wounds were closed in layers. Total operation time was 80 mminutes.

Postoperative recovery was uneventful and final histology revealed lymphangioma,

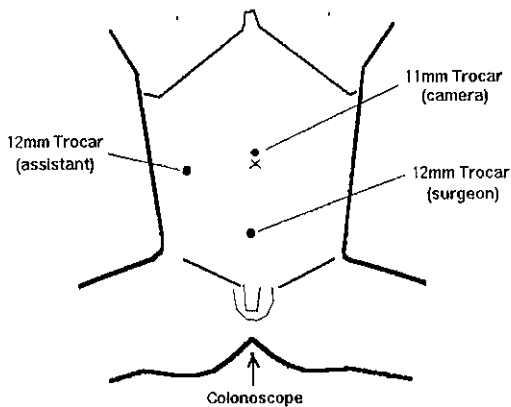


Figure 1. Position of placement of the abdominal trocars.

### Discussion

The principal advantage of a laparoscopic approach to colonic masses which are too big for colonoscopic removal is the avoidance of conventional laparotomy. The procedure is technically easy. Colonoscopic guidance is essential to precisely localize lesions for wedge resection. This technique can be used for excisional biopsy of submucosal lesions and large sessile polyps, where simple biopsy of submucosal lesions and large sessile polyps, where simple biopsy is either too dangerous or inadequate to exclude malignancy(2). For benign lesion, the technique offers the prospect of complete cure with rapid recovery while in the case of malignancy, excision of the lesion en-masse enables full assessment of wall invasion.

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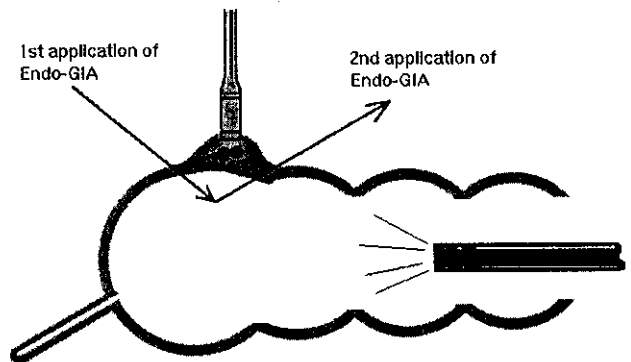


Figure 2. Resection of the cecal wall with mass by double application of Endo-GIA

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