

Role of the endo-GIA stapler in transanal excision of rectal tumours

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Benign rectal tumours or those of low-grade malignancy, such as large polyps or in situ carcinomas, often present a challenge for the surgeon who, because of the anatomic structure of the rectum and anal sphincter, must perform an invasive procedure that could be considered overtreatment. In many cases, it implies the creation of an enteric stoma. Further, the procedure is not considered to have low morbidity.

Some authors have described the transanal removal of large rectal adenomas with gastrointestinal anastomosis (GIA) staplers and have shown how the endoscopic linear stapler-cutter can be adapted to excision with optimal results (Table 1).¹⁻⁵ We report from our experience (in a young patient with a large lesion located 3 cm from the anal verge) the indications for use of the Endo-GIA (United States Surgical Corp., Norwalk,

Conn.) stapling device and the technique. We compare this technique with others used for excision of rectal tumours.

Indications for use of the stapler

Transanal Endo-GIA can be used for large sessile lesions of the lower or middle part of the rectum and villous polyps with either intermediate or severe dysplasia or in situ carcinoma.

Method

After accurate digital examination to make sure that the lesion does not adhere to the rectal wall, the lesion can be adequately exposed through a Parks dilator. The mass can be removed by traction outside the anal canal. While the surgeon maintains traction, the transanal Endo-GIA is accurately positioned at the

base of the polyp, a full-thickness staple is placed into the rectal wall (Fig. 1) and the lesion is excised.

Comparison with other methods

The main indication for use of the Endo-GIA stapler-cutter is for excision of benign tumours, but oncologic radicality can also be achieved with in situ carcinoma. Treatment of T1 rectal cancer is not an indication for this approach because it has been demonstrated that laparoscopic resection is a safer technique.⁶ Consequently, transanal resection with the Endo-GIA can be compared with transanal conventional excision and with transanal endoscopic microsurgery (TEM) and endoscopic transanal piecemeal removal.

If it is compared with transanal excision or endoscopic removal, substantial advantages can be obtained in terms of:

- Minimal risk of complications.
- Effectiveness of hemostatic excision and reduction of bleeding during the procedure.
- Shorter operating time (always a 1-stage procedure) with an uncomplicated postoperative period.
- Earlier oral intake.
- Shorter hospital stay.
- Clear margins to analyze.

From the technical viewpoint, easy access is obtained; this advantage is particularly marked when the procedure is compared with transanal excision, especially with TEM. Two disadvantages can be re-

Table 1

Previous reports on use of GIA devices

Report	Year	Device	Indication
Pelissier and Meyer ¹	1979	GIA	Villous tumours
Bailly et al ²	1993	Endo-GIA	Carcinoids, villous polyps (intermediate and severe dysplasia or T1 carcinoma)
Pol et al ³	1996	Endo-GIA	Benign and malignant polyps
Qureshi et al ⁴	1997	MULTIFIRE ENDO GIA	Rectal polyps
Allison et al ⁵	2001	Endo-GIA	Large rectal adenomas

GIA = gastrointestinal anastomosis.

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FIG. 1. With the surgeon maintaining traction on the mass, the transanal Endo-GIA is positioned at the base of the polyp so that a full-thickness staple can be placed into the rectal wall.

lated to use of the MULTIFIRE ENDO GIA: it is not feasible when lesions are located more than 10 cm from the anal margin and costs are higher than with transanal conventional excision.

Further, in case of margins containing tumour cells or a carcinoma of T1 or greater, a transabdominal approach can be performed without any further complication.

Competing interests: None declared.

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