Transanal excision of anorectal tumours using the Multifire EndoGia™ 30

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Local excision of both benign and malignant tumours of the anorectum is an acceptable procedure (1,2). Various methods have been described, some using external dissection of the rectum and anus, while others require expensive equipment and result in time-consuming, tedious surgery (3-6). This paper describes a technique for their early removal with the Endo-GIA stapling device.

The technique of transanal removal of anorectal tumours was first described in 1970 by Faivre in France (7) and by Masson in England (8). In 1972, Parks (9) described a method of excising extensive villous papillomas in the lower rectum, and in 1979 Pelissier and Meyer (10) reported the use of the automatic suturing device in excision of rectal tumours. The purpose of this report is to expand upon this technique and to describe six cases.

PATIENTS AND MATERIALS

Six patients were treated at the author’s institute between September 1993 and June 1994. The tumour was palpable through the anal orifice in all patients. It was determined that the tumour was movable before therapy was advised. Two patients had rectal ultrasound. Position in the anal canal regarding the circumference was not considered a limiting factor. Position of the tumour beyond the range of the examining finger, inability to prolapse this tumour beyond the range of the examining finger or inability to prolapse this tumour towards the anal canal, however, was considered a limiting factor.

TECHNIQUE

The patient was placed in the lithotomy position after standard bowel preparation with an electrolyte washout solution and antibiotic coverage. Exposure was obtained after anal dilation and the placement of either self-retaining rectal retractors or two Dever (Hugh Knight Inc, Louisiana) or Sims-type retractors (Hugh Knight Inc) (Figure 1). The tumour was prolapsed towards the anal canal and grasped with appropriate forceps to allow stabilization. The Endo-GIA multifire device was then put in place (Figure 2) and fired until the tumour was completely removed (Figure 3). The device and suture line could have been placed at right angles to the long axis of the body if problems were encountered due to the broad base or linear extent of the tumour. Crossing or overlapping suture lines did not cause difficulty in this series.
Complete excision of the tumour was determined by gross visual examination or, if necessary, frozen section examination. Hemostasis was obtained, when necessary, by electrospot coagulation, and in no case was oversewing of the polypoid base considered necessary.

RESULTS
Six patients ranging in age from 42 to 86 years were treated by this method. All tumours were less than 10 cm from the anal verge and all tumours consisted of villous adenomas, two with dysplasia and one with adenocarcinoma in situ. In all cases complete excision of the tumour was verified by pathologic examination with no evidence of recurrence (the longest follow-up was eight months). There have been no complications of bleeding, suture line disruption, abscess formation or urinary retention following this technique. All patients were treated as out-patients and allowed to return home approximately 2 h postprocedure. Only one patient required postoperative analgesics for rectal pain. Spontaneous evacuation of the bowels occurred and all patients were given a regimen of bulk formers and lubricants to aid bowel motions for the first seven days postsurgery.

DISCUSSION
Local excision of benign tumours of the rectum and anorectum provides a method of complete tumour eradication. It may, however, be difficult to obtain exposure and to allow proper suture closure of such wounds. Likewise, electrospot coagulation and electrocoagulation of these tumours, while viable methods, are often difficult to obtain because of exposure, and complete histological examination is not permitted. Snare excision and piecemeal excision of large polypoid lesions via the endoscope are certainly acceptable techniques. However, in lesions that can be elevated and a single specimen retrieval completed, which allow pathologic examination without the artefacts of cautery, these methods appear to be acceptable and viable.

CONCLUSIONS
Precise removal of all polyp-bearing tissue is necessary both to treat early carcinoma and to prevent the development of carcinoma from existing adenomas. Transanal excision of these lesions has been well established by a variety of techniques (11,12). This report presents a technique that is safe, rapid and allows for complete excision of the tumour.