Stapled Haemorrhoidectomy—The Evidence For and the Facts Against

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Surgeons as well as patients have recently shown much interest in stapled haemorrhoidectomy. This is a new technique, which is claimed to result in less pain than traditional operations for haemorrhoids. Conventional surgery involves total excision of the internal and external components of the haemorrhoids, in order to alleviate symptoms like bleeding and prolapse. Various methods have been used to achieve this, including leaving the wounds open or closing the wounds with sutures or staples. All of these techniques involve some cutting into the sensitively innervated skin, just outside of the anal canal. Understandably, many patients decline such surgery because of severe postoperative pain. This pain is most distressing when the patient empties his bowels and stretches the painful healing perianal wounds. In order to avoid such painful perianal wounds, Longo advocated pushing the prolapsed haemorrhoidal tissue back into the anal canal. A stapling device would then be used to excise the excessive mucosa and to interrupt the branches of the superior haemorrhoidal arteries that supply the haemorrhoids. A special stapler and kit has since been designed for this technique of stapled haemorrhoidectomy (PPH™ set; Ethicon Endo-surgery®, Ohio, USA), which has become popularly used in certain parts of Europe.

However, it was only last year that randomized controlled data regarding the efficacy of this method have been published. These studies confirmed that postoperative pain was less than conventional surgery. In particular, stapled haemorrhoidectomy patients had earlier and less painful bowel movements after surgery, had less analgesic requirements during the first 2 weeks, and no external wound healing problems. Although only one study showed earlier hospital discharge, all were agreeable on earlier return to work. The symptoms caused by residual skin tags and irregularity of the perianal skin were not different between stapled and conventional haemorrhoidectomies.

There were no difference in complication rates of stapled and conventional haemorrhoidectomies when followed-up up to 3 months. Stricture of the anorectum at the anastomosis line was the most common complication after stapled haemorrhoidectomy. Strictures usually occurred in patients who were non-compliant in taking fibre supplements postoperatively. These strictures could easily be dilated with minimal discomfort in the early weeks after surgery. An uncommon but unique complication was acute thrombosis of the external haemorrhoidal plexus. This was likely due to stapling interruption of the venous drainage, and usually resolved with conservative treatment. Possible technical complications include rectovaginal fistulae and prostatic injury, the latter causing haematuria. These injuries may be avoided by taking care to angle the stapling instrument posteriorly, when the device is fired. There was no difference in anal continence function after stapled haemorrhoidectomy or conventional haemorrhoidectomy when compared using continence scoring, quality of life assessments, anorectal manometry and endoanal ultrasound. There have been rare reports of pelvic sepsis, as well as persistent pelvic pain after stapled haemorrhoidectomy. However, these complications have not surfaced in any of the randomized controlled studies, despite non-usage of any specific preoperative bowel preparations or antibiotics.

Who then should have stapled haemorrhoidectomy? Firstly, the majority of patients with mild haemorrhoidal symptoms would be more appropriately treated by fibre supplements, life-style changes and possibly flavinoids. Meta-analysis has suggested that rubber band ligation is the safest treatment for moderate degree of haemorrhoids. Patients with symptomatic irreducible prolapsed piles would be suitable for haemorrhoidectomy. One of the options available would be the stapled technique, which is feasible even for circumferentially prolapsed or acute thrombosed piles, in the hands of skilled surgeons. However, patients have to consent to a higher cost (mean US$ 361.92) incurred for the single use stapling device. This is not recoverable from any advantages of reduced pain including reduced costs of analgesia and earlier return to work. Furthermore, patients should also understand that the long-term results, especially recurrence rates, are less well documented with the stapled technique.

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REFERENCES


