

Stapled haemorrhoidectomy or Longo's procedure? Two totally different concepts

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Longo's technique⁽¹⁾ of stapled haemorrhoidopexy began a revolution in the operative treatment of haemorrhoidal disease. The absence of painful perianal wounds has made this operation increasingly acceptable to patients and surgeons worldwide as the treatment of choice for most cases of symptomatic haemorrhoidal disease.

Longo's technique is based on the principle that the disruption of the feeding vessels that supply the haemorrhoids would be sufficient to relieve engorgement of the distal anal cushion structures, hence decreasing haemorrhoidal symptoms. This involves a circumferential mucosectomy where a ring of rectal mucosa, containing the superior haemorrhoidal arteries, is removed above the base of the haemorrhoids. Prolapsed haemorrhoidal tissue would be pushed upwards and fixed in place with a stapled anastomosis. This important second part of the procedure "creates" a "new" haemorrhoidal suspensory ligament and may be important in preventing recurrence. All these are performed with a special anorectal circular stapling kit, and avoids any incisions into sensitive anoderm and skin below the dentate line. This therefore theoretically lessens the pain following the procedure⁽²⁾.

Evidence from several randomised controlled trials showing decreased pain following stapled haemorrhoidopexy, compared to conventional haemorrhoidectomy, seems to have validated this theory^(3,4). This haemorrhoidopexy procedure is however not entirely adequate due to the oft-persistence of residual haemorrhoidal tissue, especially in very large prolapsed fourth degree haemorrhoids⁽⁵⁾. This is because Longo does not advocate excision of haemorrhoidal tissue, but rather the hitched-up piles are expected to shrivel up over a period of time post-operatively. This limitation is greatly pronounced when dealing with the much-encountered third or fourth degree haemorrhoids in our population, and presents problems in our clinical practice.

Firstly, residual haemorrhoidal tissue is prone to post-operative thrombosis and infection, and

will often result in recurrent symptoms of pain, bleeding and discharge. These residual tissues are left to resolve over time. Some tissues, however, do not resolve⁽⁶⁾. Secondly, patients' expectations are not met when they discover that they still have a lump in the anus after a purportedly more expensive form of haemorrhoidal surgery. No amount of scientific explanation will placate the patient, even though he may be free from previous symptoms of bleeding or pain. And to make matters worse, an inadvertent diagnosis of "recurrent piles" by an unsuspecting colleague is sometimes made, and a messy medico-legal tussle can ensue.

As a result, we are no longer using Longo's technique. We have modified the technique, using a specialised anorectal circular stapler (PPH set, Ethicon Endo-Surgery, Cincinnati, OH, USA) to perform excision of piles⁽⁷⁾. Our technique, unique to the Department of Colorectal Surgery at the Singapore General Hospital, is known as stapled haemorrhoidectomy. This method combines the post-operative advantages of Longo's haemorrhoidopexy with the adequacy of excision of a conventional haemorrhoidectomy.

Our stapled haemorrhoidectomy differs from Longo's procedure in the following ways:

- 1) Complete reduction of the prolapsed component into the anal canal is an essential step. As much as possible of the external component and skin tags are reduced into the central portion of the circular anal dilator (CAD 33, Ethicon Endo-Surgery, Cincinnati, OH, USA) with the help of forceps and gauze swabs. This facilitates the inclusion of these tissues into the stapler housing and subsequent excision.
- 2) Low purse-string suture. Longo's technique calls for placement of the purse-string suture at 5cm above the dentate line. We find that this is technically demanding, especially in cases of large piles. It also makes the reduction of the external component difficult. A lower purse-string of 3cm above the dentate line, helps to incorporate these redundant tissue into the opened "jaws" of the circular stapler.

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Longo's technique revolutionised haemorrhoidal surgery as it is based on the correction of the pathophysiology of piles symptomology⁽⁸⁾. This is as opposed to conventional surgical haemorrhoidectomy which is merely an ablation of symptoms i.e. excision of troublesome piles without regard for their anatomical significance. Stapled haemorrhoidectomy as practised by our department goes a step further by trying to achieve both correction of anatomy and ablation of symptoms utilising sound surgical and physiological principles.

Stapled haemorrhoidectomy can thus be performed for wider indications compared to Longo's technique. It is an effective alternative to the open conventional technique when it comes to large piles⁽⁵⁾, or acutely thrombosed⁽⁹⁾ or bleeding piles; which may be less effective with Longo's original procedure or even contraindicated. In the often-encountered orange-sized piles in our practice, stapled haemorrhoidectomy with its lower purse-string suture may be more effective and is in fact easier to perform, with a good patient outcome⁽⁸⁾. There have been favourable comparisons with regard to complication rates and safety results between our stapled haemorrhoidectomy procedure and that of other institutions^(6,10-13). We have also found no difference in outcome as far as pain is concerned whether a stapled haemorrhoidectomy or Longo's procedure is performed.

In conclusion, stapled haemorrhoidectomy and Longo's procedure are two totally different concepts. Each technique is suitable for a different practising climate. We clarify that the original

Longo's procedure is not practised anymore in our department, for the above-mentioned reasons. In our experience, stapled haemorrhoidectomy is the technique of choice for symptomatic prolapsed haemorrhoids.

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