

## What is the Technique without a Proper Classification?

Gianmarco Grimaldi and Stefano Pontone\*

Department of Surgical Sciences, "Sapienza" University of Rome, Italy

Dear Sir,

We read with interest the commentary by Morelli [1] and we are in agreement with the need to investigate the classifications evolution in association with the treatment techniques. This is the important conceptual message which is contained within the commentary. In fact, also in our experience [2], the classification has a significant effect on patient selection and choice of treatment.

Recently, small randomized-controlled trials comparing stapled haemorrhoidopexy (SH) with traditional excisional surgery have shown it to be less painful and that is associated with quick recovery [3-6]. The reports also suggest a better patient's acceptance and a higher compliance with day-case procedures potentially making it more economical. At the same time, several studies comparing SH and Milligan-Morgan (M-M) surgery demonstrated that stapled technique, associated with less pain in the immediate postoperative period, presents a higher risk of recurrence and residual prolapse, with necessity of reintervention and some other symptomatic treatment in long term follow-up [7-9].

Recently, several studies reported a higher percentage of haemorrhoid recurrence after SH, especially in patients with fourth degree haemorrhoids. They suggest that the treatment of second, third and fourth degree haemorrhoids by SH technique, gives optimal results in terms of less postoperative pain, faster return to work and shorter hospital stay, indicating a higher recurrence rate in fourth-degree haemorrhoids patients when the long-term evaluation is considered [8,10,11]. Therefore even if the SH is a safe and effective treatment for haemorrhoids, needs a rigorous patients selection. Furthermore, by applying the SH technique, there is the risk of intraoperative and immediate postoperative complications, such as closing or perforation of rectum, pelvic sepsis and mechanical circular suture dehiscence [10,11].

Basing on the clinical evidence and literature revision, the decision to use SH or M-M, should be primarily based on the priorities and preferences of the patient (pain reduction and a rapid return to work / activities in the short-term, or reduction in the risk of recurrence in the long term), and the preference of the surgeon [12].

A new technique based on doppler-guided ligation of the terminal branches of the superior haemorrhoidal artery was introduced in 1995 as an alternative to haemorrhoidectomy. Several studies reported that there are some terminal branches from the superior rectal artery-corresponding to the distribution of the anal cushions which varies widely in number and position.

The rationale of this treatment was later supported by the findings from vascular studies, which demonstrated that patients with haemorrhoids had increased caliber and arterial blood flow of the terminal branch of the superior rectal arteries. Therefore, ligating the arterial supply to haemorrhoidal tissue by suture ligation may improve haemorrhoidal symptoms. DGHAL is most effective for second- or third-degree haemorrhoids.

In a study of Miyamoto et al. [13] is described that there were always more than three (usually six) terminal branches of haemorrhoidal

### Publication History:

Received: April 17, 2015

Accepted: May 19, 2015

Published: May 21, 2015

### Keywords:

Milligan-Morgan, Stapled haemorrhoidopexy, Doppler-guided haemorrhoidal artery ligation

arteries to be ligated, despite the Goligher grade. In their research, the median number of haemorrhoidal arteries increased from three to six with progression of the Goligher grade from Grade 1 to Grade 4. Patients with haemorrhoidal disease have larger diameter vessels and increased blood flow compared with control patients and these changes are more pronounced as the haemorrhoidal grade increases. The diameter or velocity of the haemorrhoidal arteries increases as the haemorrhoidal grade increases, and a power Doppler signal in the haemorrhoidal tissue might be easier to detect with the growth of the haemorrhoid.

Goligher classification does not enable an unique choice of the technique to use, in fact in the second-degree hemorrhoids are indicated the doppler-guided haemorrhoidal artery ligation and only in selected cases M-M; in the third degree hemorrhoids are suggested M-M, SH and the doppler-guided haemorrhoidal artery ligation; in fourth-degree hemorrhoids are indicated M-M and SH [14].

Furthermore different philosophies regarding the pathogenesis of haemorrhoidal disease creates different surgical approaches. Thus, when the supporting tissues of the anal cushions is disintegrated or deteriorated is indicated M-M. In the other hand, the haemorrhoidal prolapse associated with an internal rectal prolapse is suggested the SH. However, an indication space could be reserved for the doppler-guided haemorrhoidal artery ligation when haemorrhoids resulting from the hyperperfusion of arteriovenous plexus within anal cushion.

In conclusion, although there are numerous techniques for the treatment of hemorrhoids, it remains difficult to make a choice for a best technique. This depends on the absence of appropriate and updated haemorrhoids classification that follows the evolution of new techniques. For this reason, we think that a better pre-operative classification could be obtained through an objective method such as the doppler haemorrhoidal artery in vivo evaluation supporting the Goligher classification.

**\*Corresponding Author:** Dr. Stefano Pontone, Department of Surgical Sciences, "Sapienza" University of Rome, V.le Regina Elena n. 324 00161 - Rome, Italy, Tel: 00390649975503; E-mail: [stefano.pontone@uniroma1.it](mailto:stefano.pontone@uniroma1.it)

**Citation:** Grimaldi G, Pontone S (2015) What is the Technique without a Proper Classification?. Int J Gastroenterol Disord Ther 2: 113. doi: <http://dx.doi.org/10.15344/2393-8498/2015/113>

**Copyright:** © 2015 Grimaldi et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

---

## References

1. Morelli U (2015) Hemorrhoidal Disease, from Legacy to a Change of Perspective. *Int J Gastroenterol Disord Ther* 2: 112.
2. Panarese A, Pironi D, Vendettuoli M, Pontone S, Arcieri S, et al. (2012) Stapled and conventional Milligan-Morgan haemorrhoidectomy: different solutions for different targets. *Int J Colorectal Dis* 27: 483-487.
3. Longo A (1998) Treatment of haemorrhoidal disease by reduction of mucosa and haemorrhoidal prolapse with a circular suturing device: a new procedure. *Proceedings of the 6th World Congress of Endoscopic Surgery Bologna, Italy Monduzzi Editore.*
4. Nisar PJ, Acheson AG, Neal KR, Scholefield JH (2004) Stapled hemorrhoidopexy compared with conventional hemorrhoidectomy: systematic review of randomized, controlled trials [in German]. *Dis Colon Rectum* 47: 1837-1845.
5. Tjandra JJ, Chan MK (2007) Systematic review on the procedure for prolapse and hemorrhoids (stapled hemorrhoidopexy). *Dis Colon Rectum* 50: 878-892.
6. Longo A (2002) Stapled anopexy and stapled hemorrhoidectomy: two opposite concepts and procedures. *Dis Colon Rectum* 45: 571-572.
7. Palimento D, Picchio M, Attanasio U, Lombardi A, Bambini C, et al. (2003) Stapled and open hemorrhoidectomy: randomized controlled trial of early results. *World J Surg* 27: 203-207.
8. Ortiz H, Marzo J, Armendáriz P, De Miguel M (2005) Stapled hemorrhoidopexy vs. diathermy excision for fourth-degree hemorrhoids: a randomized, clinical trial and review of the literature. *Dis Colon Rectum* 48: 809-815.
9. Pavlidis T, Papaziogas B, Souparis A, Patsas A, Koutelidakis I, et al. (2002) Modern stapled Longo procedure vs. conventional Milligan-Morgan hemorrhoidectomy: a randomized controlled trial. *Int J Colorectal Dis* 17: 50-53.
10. Jayaraman S, Colquhoun PH, Malthaner RA (2007) Stapled hemorrhoidopexy is associated with a higher long-term recurrence rate of internal hemorrhoids compared with conventional excisional hemorrhoid surgery. *Dis Colon Rectum* 50: 1297-1305.
11. Chen JS, You JF (2010) Current status of surgical treatment for hemorrhoids--systematic review and meta-analysis. *Chang Gung Med J* 33: 488-500.
12. Fueglistaler P, Guenin MO, Montali I, Kern B, Peterli R, et al. (2007) Long-term results after stapled hemorrhoidopexy: high patient satisfaction despite frequent postoperative symptoms. *Dis Colon Rectum* 50: 204-212.
13. Miyamoto H, Asanoma M, Miyamoto H, Takasu C, Masamune K, et al. (2013) Visualization and hypervascularization of the haemorrhoidal plexus in vivo using power Doppler imaging transanal ultrasonography and three-dimensional power Doppler angiography. *Colorectal Dis* 15: e686-691.
14. Lohsiriwat V (2012) Hemorrhoids: from basic pathophysiology to clinical management. *World J Gastroenterol* 18: 2009-2017.