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Research Article

SURGICAL MANAGEMENT OF HAEMORRHOIDS – A NEW APPROACH FINGER GUIDED HAEMORRHOIDAL ARTERY LIGATION (FGHAL) WITH LASER HAEMORRHOIDOPLASTY (LHP)

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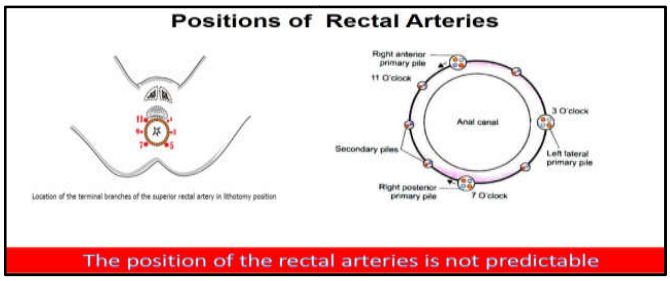
ABSTRACT

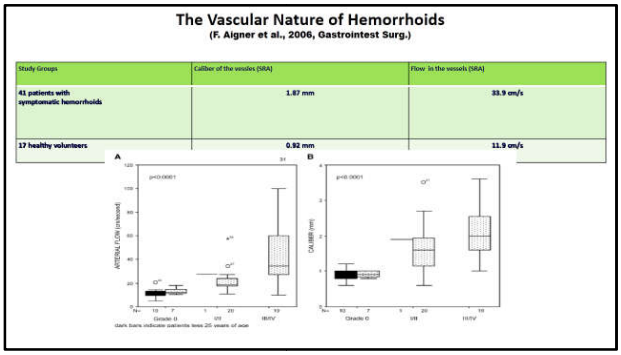
Objective: The aim of this study was to combine Haemorrhoidal Artery Ligation with Laser Haemorrhoidoplasty and to know the outcome of the procedure.

INTRODUCTION

Doppler Guided Haemorrhoidal Artery Ligation (DGHAL) was first published in 1995 by a Japanese Surgeon Morinaga [1]. A simple ligation technique was however first reported by Blaisdell in 1958[2].

Subsequently in 2004 Aigner *et al*[3]studied the superior haemorrhoidal artery (SHA) and its branching pattern. It was demonstrated that the SHA branching did not course exactly at 3, 7& 11 o'clock position. Moreover in 82% of cases, the SHA had bifurcation in 82% of cases and trifurcation in 12% of cases. Further when SHA terminates, it divides into left and Right branches which further give rise to 3-4 branches each. After studying the vascular nature of haemorrhoids, Aigner *et al* in 2006 [4,5] postulated that there was 3 times increased blood flow in the superior haemorrhoidal vessels supplying the anal cushions and hence leading to engorgement. This subsequently leads to development of haemorrhoids.





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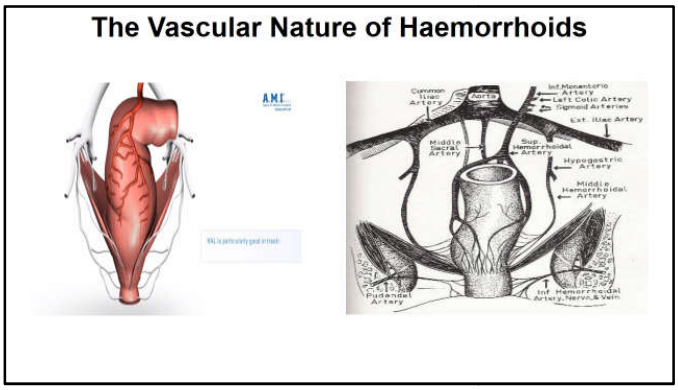

Based on these principles of Morinaga and Aigner, instead of using DGHAL probes which are available as single use and expensive, we tried to palpate the branches of SHA with index finger at 2- 3cms. Above the dentate line(at the apex of pile masses) and ligate them all.

Goligher *et al* [8]published the sliding anal cushion[6,7] theory in 1986 for prolapsing haemorrhoids. To deal with this Laser Haemorrhoidoplasty (LHP) was added. This was based on the principle that the laser energy which is a thermal energy leads to dearterialisation, shrinkage and fibrosis of the prolapsing element. Equipment used is 1470nm wavelength from NeoV. Hence it is being suggested that the use of the Finger guided HAL (FGHAL) is quite effective method for HAL. Doppler transducer is not mandatory does not contribute to the beneficial effect of these ligation procedures.

METHODS

The authors conducted a clinical trial and operated a total of 252 patients over a period of 21 months, from March 2017 to November 2019. Mean age of the patients was, 48 years for males [188] and 51 for females [64]. Grade 4 haemorrhoids were excluded from the study. Anticoagulants were stopped 5 days prior to surgery in all those patients who were on anticoagulants. Patients with grade II (where medical management failed and grade III haemorrhoidal disease were treated with FGHAL procedure without use of the Doppler transducer and Laser Haemorrhoidoplasty. Sole principle behind combining LHP was to promote collagen type fibres and hence fixation of prolapsing haemorrhoids. All patients were followed for improvement of clinical parameters from 6 months to one year.

RESULTS

After 6 to 8 weeks, significant improvement was observed with regard to blood loss, pain and prolapse. The improvement of symptoms were at par as mentioned in literature where DGHAL was recommended. The complications like post-operative edema, pain (VAS score up to 5) and secondary hemorrhage (0.5%) was attributed to LHP[10]. After 3 months all the patients were symptom free.

CONCLUSIONS

Our findings confirm that Finger Guided Haemorrhoidal Artery Ligation is equally effective when compared to Doppler Guided HAL. Laser Haemorrhoidoplasty role was attributed to fixation of anal cushions to its original position due to fibrosis and regeneration of type 3 collagen fibres[9]. Long term results of the combined procedure looks promising.

References

1. Morinaga K, Hasuda K, Ikeda T. A novel therapy for internal haemorrhoids: ligation of the haemorrhoidal artery with a newly devised instrument (Moricorn) in conjunction with a Doppler flowmeter. Am J Gastroenterol. 1995;90:610–613
2. Am J Surg.1958 Sep; 96(3):401-4. Office Ligation of internal haemorrhoids
3. F. Aigner *et al*., 2006, Gatrointestinal Surg.
4. Aigner F, Gruber H, Conrad F, Eder J, Wedel T, Zelger B, Engelhardt V, Lametschwandtner A, Wienert V, Böhler U, *et al*. Revised morphology and hemodynamics of the anorectal vascular plexus: impact on the course of haemorrhoidal disease. Int J Colorectal Dis. 2009;24:105–113.
5. Aigner F, Bodner G, Gruber H, Conrad F, Fritsch H, Margreiter R, Bonatti H. The vascular nature of haemorrhoids. J Gastrointest Surg. 2006;10:1044–1050.
6. Thomson WH. The nature of haemorrhoids. Br J Surg. 1975;62:542–552.
7. Thomson WH. The nature and cause of haemorrhoids. Proc R Soc Med. 1975;68:574–575.
8. Goligher, Duthie H, Nixon H. Surgery of anus, rectum and colon 5, London: Balliere Tindall;1
9. Journal of Coloproctology (Rio de Janeiro) *Print version* ISSN 2237-9363*On-ine version* ISSN 2317-6423J. Coloproctol. (Rio J.) vol.36 no.3 Rio de Janeiro July/Sept. 2016http://dx.doi.org/10.1016/j.jcol.2016.04.003
10. A new method for haemorrhoid surgery: intrahaemorrhoidal diode laser, does it work? N Crea, G Pata, M Lippa, D Chiesa… - *The American Journal of* …, 2014 - Elsevier
    Helio Plapler, Raduan Hage, +4 authors Thiago Yukio Fukuda Published 2009 in Photomedicine and laser surgery DOI:10.1089/pho.2008.2368 Haemorrhoidal laser procedure: short-and long-term results from a prospective study.

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