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EDITORIAL

Redefining hemorrhoid therapy with endoscopic polidocanol foam sclerobanding

Asad Gul Rao, Abdulqadir J Nashwan

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Asad Gul Rao, Department of Clinical Medicine, Dow Medical College, Karachi 74200, Pakistan

Abdulqadir J Nashwan, Department of Nursing & Midwifery Research, Hamad Medical Corporation, Doha 3050, Qatar

Corresponding author: Abdulqadir J Nashwan, MSc, PhD, Research Scientist, Department of Nursing & Midwifery Research, Hamad Medical Corporation, Rayyan Road, Doha 3050, Qatar. anashwan@hamad.qa

Abstract

Hemorrhoids are a common and painful condition, with conventional treatments such as endoscopic rubber band ligation (ERBL) and injection sclerotherapy often falling short due to high recurrence rates and significant post-operative pain. A clinical trial by Qu *et al* introduces a novel approach called endoscopic polidocanol foam sclerobanding (EFSB). This multicenter randomized trial involved 195 patients with grade II and III internal hemorrhoids and demonstrated that EFSB significantly reduced recurrence rates and post-procedural pain while improving symptom relief and patient satisfaction compared to ERBL. The study's strengths include its robust design, comprehensive outcome evaluation, and patient-centered approach. Despite limitations such as the single-blind design and relatively short follow-up period, the findings suggest that EFSB could enhance clinical practice by offering a more effective and patient-friendly treatment option. Further research is needed to validate these results and explore the long-term benefits and cost-effectiveness of EFSB.

Key Words: Hemorrhoids; Endoscopic polidocanol foam sclerobanding; Rubber band ligation; Injection sclerotherapy; Hemorrhoids recurrence; Post-operative pain

Core Tip: This editorial highlights the groundbreaking study by Qu *et al*, which reveals that endoscopic polidocanol foam sclerobanding effectively reduces recurrence and post-procedural pain in grade II and III internal hemorrhoids compared to the traditional endoscopic rubber band ligation. Despite multiple limitations, such as a shorter follow-up period and potential subjective bias, the trial reflects profound clinical implications while suggesting additional research and innovative approaches to treatment.

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INTRODUCTION

Hemorrhoids are the most prevalent anorectal condition, affecting a significant portion of the adult population. Despite being a generally benign condition, a recent survey reported that almost 11% of the general population suffers from hemorrhoids[1]. They are characterized by enlarged and inflamed veins in the rectum and anus, and the symptoms can vary from moderate discomfort to excruciating pain, bleeding per rectum, rectal swelling, and prolapse during bowel movements[2]. Although the pathophysiology of hemorrhoids is unclear, the risk factors are widely known, which include pregnancy, a low-fiber diet, alcohol intake, and constipation[3]. Based on the extent of prolapse through the anus, the Goligher classification system is typically used to classify the severity of hemorrhoids. This approach classifies a hemorrhoid as Grade 1 if it bleeds but fails to prolapse; Grade 2: The hemorrhoid may prolapse with straining but automatically reduces; Grade 3: The hemorrhoid prolapses with straining but has to be manually reduced; and Grade 4: The hemorrhoid is permanently prolapsed and cannot be manually reverted[4].

Multiple non-surgical treatment options are available for the treatment of hemorrhoids, with endoscopic rubber band ligation (ERBL) and injection sclerotherapy being the cornerstone procedures[5]. However, these options are associated with significantly higher rates of prolapse recurrence and post-operative pain[6,7]. The lack of approaches with minimal perioperative pain and decreased recurrence is one of the major factors negatively impacting the quality of life of patients. The combination of anesthetic sclerotherapy and ligation has been hypothesized to enhance treatment outcomes by leveraging the benefits of both methods[8]. In this critical context, Qu *et al*[9] evaluated a novel approach by combining polidocanol foam sclerotherapy with ERBL, known as endoscopic polidocanol foam sclerobanding (EFSB)[9].

THE EFFICACY OF EFSB FOR GRADE II-III HEMORRHOIDS

The study by Qu *et al*[9] sought to assess the long-term effectiveness, patient satisfaction, and post-operative pain associated with EFSB compared with ERBL. The trial, which was carried out in four tertiary hospitals in China, included 195 patients with grade II–III internal hemorrhoids who were randomized to receive either ERBL or EFSB treatment. Patients were monitored closely, and thorough follow-up evaluations were performed on a regular basis to gauge the effectiveness and safety of the procedures at 24 hours, 1 week, 4 weeks, 8 weeks, and 12 months[9]. The Hemorrhoid Severity Score (HSS), the Visual Analog Scale (VAS) for pain, and recurrence rates were the key measures.

Qu *et al*[9] reported that patients in the EFSB group showed substantially improved symptom relief, as evidenced by significantly lower HSS scores at 8 weeks and 12 months when compared to the ERBL group[9]. The enhanced efficacy can be attributed to the synergistic effect of polidocanol foam and ligation, inducing inflammation and fibrosis of the hemorrhoidal tissue[10]. Moreover, in comparison to the ERBL group (21.6%), the prolapse recurrence rate at 12 months was much lower in the EFSB group (11.2%), suggesting EFSB as a more durable solution. Additionally, the EFSB group experienced much less immediate post-procedural discomfort, as evidenced by the lower median VAS values for pain 24 hours after the procedure. This finding is significantly important as it addresses one of the major drawbacks of ERBL discussed earlier.

The efforts made by Qu *et al*[9] in assessing the effectiveness of EFSB for patients with grade II and III hemorrhoids are to be congratulated. Conducted across four tertiary hospitals, the multicenter design solidified the generalizability of the findings as the outcomes are more likely applicable to a broader population. Moreover, both EFSB and ERBL procedures were performed using standardized techniques across all centers. This consistency ensured the minimal occurrence of procedural discrepancies. Furthermore, the trial used both objective (HSS) and subjective (VAS for pain and patient satisfaction) measures to assess outcomes, providing a holistic view of the treatment effects.

However, this study has several limitations and shortcomings that should be considered. Although Qu *et al*[9] included a thorough follow-up period of 12 months, it may still be inadequate to completely assess the long-term efficacy of EFSB as hemorrhoids can exhibit recurrence beyond this timeframe. Secondly, while subjective measures like the VAS score for pain and patient satisfaction offer insightful data, they are inevitably susceptible to reporting bias as patients' perceptions can be affected by a variety of unrelated factors. Thirdly, financial considerations are crucial for decision-making, particularly when introducing new treatment modalities. In this regard, this trial did not include an analysis of the cost-effectiveness of EFSB compared to conventional ERBL.

Despite having several limitations, the clinical implications of this trial by Qu *et al*[9] are profound. Compared to the standard options, the EFSB group's notable decrease in grade II and III hemorrhoid recurrence rates may result in fewer repeat surgeries and better long-term patient outcomes. With superior symptom control and significantly lower post-operative pain, EFSB can improve patient compliance and satisfaction, ultimately leading to a quicker return to normal activities and a better quality of life. In addition, the increased patient satisfaction rates in the EFSB group highlight the value of patient-centered care, consequently enhancing the treatment arsenal. These advantages associated with EFSB can inform updates to clinical practice guidelines, encouraging evidence-based recommendations and efficient standardized care.

CONCLUSION

The randomized control trial by Qu *et al*[9] shows that EFSB is an important breakthrough in the management of grade II–III internal hemorrhoids. As demonstrated in the study, EFSB provided better symptom relief, reduced recurrence rates, and less post-operative pain, leading to improved patient satisfaction. Further studies with longer follow-ups and more diverse, larger population sizes would support the validity of these results and solidify EFSB as a recommended course of treatment. Furthermore, examining the cost-effectiveness of EFSB in comparison to other therapies may offer insightful information to policymakers and healthcare professionals, advocating the widespread adoption of this ground-breaking technique. As we continue to seek novel solutions in hemorrhoid management, EFSB stands out as a promising approach that merits integration into future clinical practice and research.

FOOTNOTES

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Country of origin: Qatar

ORCID number: Abdulqadir J Nashwan 0000-0003-4845-4119.

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REFERENCES

1 **Sheikh P**, Régnier C, Goron F, Salmat G. The prevalence, characteristics and treatment of hemorrhoidal disease: results of an international web-based survey. *J Comp Eff Res* 2020; **9**: 1219-1232 [PMID: 33079605 DOI: 10.2217/cer-2020-0159]
2 **Lohsiriwat V**. Hemorrhoids: from basic pathophysiology to clinical management. *World J Gastroenterol* 2012; **18**: 2009-2017 [PMID: 22563187 DOI: 10.3748/wjg.v18.i17.2009]
3 **Loder PB**, Kamm MA, Nicholls RJ, Phillips RK. Haemorrhoids: pathology, pathophysiology and aetiology. *Br J Surg* 1994; **81**: 946-954 [PMID: 7922085 DOI: 10.1002/bjs.1800810707]
4 **Clinical Practice Committee, American Gastroenterological Association**. American Gastroenterological Association medical position statement: Diagnosis and treatment of hemorrhoids. *Gastroenterology* 2004; **126**: 1461-1462 [PMID: 15131806 DOI: 10.1053/j.gastro.2004.03.001]
5 **Tutino R**, Massani M, Jospin Kamdem Mambou L, Venturelli P, Della Valle I, Melfa G, Micheli M, Russo G, Scerrino G, Bonventre S, Cocorullo G. A Stepwise Proposal for Low-Grade Hemorrhoidal Disease: Injection Sclerotherapy as a First-Line Treatment and Rubber Band Ligation for Persistent Relapses. *Front Surg* 2021; **8**: 782800 [PMID: 35083270 DOI: 10.3389/fsurg.2021.782800]
6 **Dekker L**, Han-Geurts IJM, Rørvik HD, van Dieren S, Bemelman WA. Rubber band ligation versus haemorrhoidectomy for the treatment of grade II-III haemorrhoids: a systematic review and meta-analysis of randomised controlled trials. *Tech Coloproctol* 2021; **25**: 663-674 [PMID: 33683503 DOI: 10.1007/s10151-021-02430-x]
7 **Wehrmann T**, Riphaus A, Feinstein J, Stergiou N. Hemorrhoidal elastic band ligation with flexible videoendoscopes: a prospective, randomized comparison with the conventional technique that uses rigid proctoscopes. *Gastrointest Endosc* 2004; **60**: 191-195 [PMID: 15278043 DOI: 10.1016/s0016-5107(04)01551-2]
8 **Pata F**, Bracchitta LM, D'Ambrosio G, Bracchitta S. Sclerobanding (Combined Rubber Band Ligation with 3% Polidocanol Foam Sclerotherapy) for the Treatment of Second- and Third-Degree Hemorrhoidal Disease: Feasibility and Short-Term Outcomes. *J Clin Med* 2021; **11** [PMID: 35011962 DOI: 10.3390/jcm11010218]

9 **Qu CY**, Zhang FY, Wang W, Gao FY, Lin WL, Zhang H, Chen GY, Zhang Y, Li MM, Li ZH, Cai MH, Xu LM, Shen F. Endoscopic polidocanol foam sclerobanding for the treatment of grade II-III internal hemorrhoids: A prospective, multi-center, randomized study. *World J Gastroenterol* 2024; **30**: 3326-3335 [PMID: 39086750 DOI: 10.3748/wjg.v30.i27.3326]

10 **Lobascio P**, Laforgia R, Novelli E, Perrone F, Di Salvo M, Pezzolla A, Trompetto M, Gallo G. Short-Term Results of Sclerotherapy with 3% Polidocanol Foam for Symptomatic Second- and Third-Degree Hemorrhoidal Disease. *J Invest Surg* 2021; **34**: 1059-1065 [PMID: 32290709 DOI: 10.1080/08941939.2020.1745964]

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