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Invited Commentary

A Commentary on the article: "Risk factors for recurrence after anal fistula surgery: A meta-analysis", Int J Surg 2019;69:153–164

Anal fistula is a relatively common disease. It affects millions of people all over the world. The predisposing incidence is perianal abscess with aetiological factors which are not identified in the majority of patients. Approximately half of perianal abscesses develop into anal fistulas, and again it is not fully known which one does. Anal fistula is a surgical disease. Even in patients with inflammatory bowel disease (IBD), e.g. Crohn's disease; the ultimate treatment is surgery with a spectrum of risks.

The major drawback for surgical treatment of anal fistula is recurrence. Recurrence of anal fistula is most annoying and it adversely affects the decision of patients to undergo surgical treatment. Recurrence of anal fistula after surgery is also a surgeon's dilemma. Thus, every surgeon wants to know why recurrence happens and how it can be prevented.

Zubing Mei et al. [1] performed a meta-analysis which included all studies available in the PubMed and EMBASE, without any language restriction and from inception to April 2018. This meta-analysis reported the risk factors predisposing to recurrence of anal fistula after surgery. Twenty observational studies comprising of 6168 patients were selected according to predefined inclusion/exclusion criteria. Factors relating to patients, surgical procedures and fistula specifications that were significantly associated with recurrence of anal fistula after surgery were identified. These factors can be utilized by surgeons for preoperative advice to patients who are at high risks of recurrence. This study may be considered as a significant endeavor since it is quite comprehensive and it employs a high standard of statistical methodology.

Significant risk factors associated with postoperative anal fistula recurrence were reported by this meta-analysis as: prior anal surgery, seton placement, high *trans*-sphincteric fistula, undetected internal opening, horseshoe extension, and multiple fistula tracts.

These findings are in concordance with previously reported research outcomes, except for seton placement which has not been reported to increase recurrence rates in two recent studies [2,3]. Evidence regarding the association of seton placement with increased recurrence in the Zubing Mei et al. study [1] is of moderate-quality. Therefore, this association should be considered as the subject for future research.

This study also found age, smoking, and obesity to have no significant association with anal fistula recurrence. This is in discordance with previously reported study outcomes [4,5]. However, this should be considered as a significant finding based on the methodological validity of the study by Zubing Mei et al. [1]. The strengths of this study are the comprehensive evaluation of a wide range of risk factors, inclusion of the entire databases of PubMed and EMBASE, and assessment of the strengths of the supporting evidence by statistical analytic methods. However, further studies need to be performed to confirm of these findings.

The findings of this research that are in line with the existing evidence are valuable since they strongly support previously reported research results. Those that are significantly different should be regarded as important findings that challenge the presently accepted principles, and they need further scientific studies in future.

Conflicts of interest

None.

Provenance and peer review

Invited Commentary, internally reviewed.

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Karimian F. (MD FACS)
Tehran University of Medical Science, Tehran, Iran
E-mail address: faramarz.karimian@gmail.com.

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