COMMENT



Comment to: Post operative pain associated with ProGrip mesh hernioplasty

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Dear editor,

We read with great interest Alenezi et al.'s recent paper on the use of self-adhering mesh in inguinal hernia repair [1]. Given our interest and experience with this type of mesh, we wished to shed more light on the findings of this study, and other potential applications of this technology.

Traditional options for mesh fixation in hernia repair include sutures, tacks, and fibrin glue [2]. Self-adhering mesh, such as ProGrip[™] (Medtronic, Minneapolis, MN), consists of a permanent macroporous mesh, with absorbable microgrips [3]. The microgrips attach to tissues with great strength, due to the large surface area of contact. As the authors concluded, the use of self-adhering mesh in inguinal hernia repair is associated with shorter operating time, and decreased postoperative pain, compared to sutured mesh.

A less well known, but no less important, application of self-adhering mesh, is in abdominal hernia repair, where the use of sutured mesh can also result in nerve entrapment and chronic pain. We have previously published our intermediate [3] and long-term outcomes [4] with the use of retromuscular self-adhering mesh in abdominal hernia repair. We found that patients who received self-adhering mesh had a shorter surgery and a shorter length of hospital stay and required lower doses of narcotics compared to those who received transfascially-sutured mesh. Importantly, the rates of surgical-site occurrences and hernia recurrences were similar between the two groups [3, 4].

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When considering using self-adhering mesh in abdominal hernia repair, it is important to correctly identify patients who are good candidates for this procedure. The ideal mesh location is the retromuscular plane, so the surgeon must be able to develop and completely close that plane with an intact posterior rectus sheath to avoid contact between viscera and mesh. Ideally, the surgeon should also be able to close the anterior rectus sheath on top of the mesh in a tension-free manner, utilizing unilateral or bilateral components separation, if necessary.

Contrary to the authors' finding of increased recurrence rate with the use of self-adhering mesh in inguinal hernia repair, most prior studies found self-adhering mesh to have comparable or even greater fixation strength to tacks, fibrin glue and sutures. [2] In fact, none of the studies included in this systematic review found a statistically-significant difference in hernia recurrences. This may highlight the importance of systematic reviews, such as this one by Alenezi et al., [1] to achieving higher statistical power and identifying smaller differences than individual studies can.

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Declarations

Competing interests Dr. Khansa receives book royalties from Amazon Kindle Direct Publishing. Dr. Janis receives royalties from Thieme and Springer Publishing.

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