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Preserve what you do not need to divide: rethinking posterior rectus sheath division in eTEP for inguinal and small ventral hernias

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A Letter to the Editor on
Posterior rectus sheath reattachment after eTEP Rives: Are we solving the right problem?

by Daes J (2026) J. Abdom. Wall Surg. 5:17986. doi: 10.3389/jaws.2026.17986

To the editor

We read with great interest the editorial by Daes, "Posterior rectus sheath reattachment after eTEP Rives: are we solving the right problem?" [1]. We commend the author for clear and intellectually honest appraisal of an important issue. The editorial distinguishes morphology, bulging and function—endpoints that have often been discussed interchangeably. Author proposes adaptive versus maladaptive remodeling as testable framework [1]. It is particularly commendable that surgeon who pioneered eTEP has openly reflected on its limitations, reminding us that even successful innovations deserve continued critical appraisal.

The current debate has largely focused on what should be done after posterior rectus sheath (PRS) has been divided—whether it should be reapproximated or left open. However, we would like to take the discussion one step further: if dividing the PRS is not necessary to accomplish a particular repair, should we be dividing it at all?

Open or closed, the sheath was divided

The available evidence does not establish that PRS division directly causes postoperative bulging. As Daes highlights, bulging has been reported both with and without PRS closure. Objective bulging occurred in 5 of 30 patients after eTEP Rives repair without PRS reattachment [1]. Rossi et al. reported bulging in 9 of 33 patients despite systematic PRS closure [2]. Halpern et al. similarly reported bulging in 18.5% of patients with PRS closure versus 21.8% in non-closure cohort, without a significant

difference [3]. These findings appropriately caution against assuming that closure alone prevents bulging.

These studies raise more fundamental question. If bulging can occur whether PRS is left open or closed, perhaps the issue is not simply what happens to sheath after division. What these patients share is division of PRS, wide retromuscular dissection and alteration of normal geometry of the abdominal wall. As Daes describes, reconstruction can change muscle position, tension and force distribution, with reported rectus atrophy and reduced muscle density on CT [1].

This leads us to ask: Did PRS need to be divided in the first place?

PRS and its attachment to linea alba are not passive layers that can be divided and reconstructed without consequence. They form part of native architecture through which abdominal wall transmits and distributes force. Even careful reapproximation cannot be assumed to reproduce its original anatomy and function completely.

Preservation is achievable: our inguinal experience

Our experience with eTEP for inguinal hernia illustrates that anatomical preservation can be incorporated into this technique. The crossover manoeuvre, which divides the insertion of PRS into linea alba to access contralateral space, has traditionally been regarded as defining step of inguinal eTEP. We recently described change in port position which restores triangulation within the extraperitoneal space already created by eTEP. In our series, approximately 98% of patients achieved complete critical view of myopectineal orifice with PRS and linea alba left intact [4].

Crossover was reserved as a rescue manoeuvre for small minority of patients with short stature or narrow umbilico-pubic distance. Avoiding routine crossover also removes potential for midline injury and interparietal herniation described after eTEP. Although this was a single-centre retrospective experience and was not designed to assess contour or functional outcomes, it demonstrates that posterior layer can be preserved without compromising essential objectives of surgery.

eTEP for small ventral hernias: a disproportionate trade

This principle becomes particularly relevant to expanding use of eTEP Rives for small ventral hernias. Daes noted that bulging first drew his attention in patients undergoing eTEP for small ventral defects with diastasis whereas contour generally improves following reconstruction of larger defects [1].

The balance between benefit and anatomical disruption may be least favourable when the technique is applied to a small, uncomplicated defect. A patient with a 1.5-cm umbilical or epigastric hernia has a relatively small anatomical problem. Bilateral PRS division, wide retromuscular dissection and possibility of postoperative bulging may represent a disproportionate intervention. Bulging is not recurrence, but to a patient it may look and feel very much like one.

Repairing a small hernia only to leave a new abdominal wall bulge is difficult to justify

Several established alternatives allow repair while preserving the posterior layer, including open suture repair for very small defects and open or minimally invasive preperitoneal mesh repair, in accordance with the joint European and Americas Hernia Society guidelines [5]. Where diastasis coexists, its treatment should similarly be guided by symptoms, functional impairment and patient goals rather than by the availability of a retromuscular plane.

The choice of technique should therefore follow the requirements of the defect and patient rather than familiarity of surgeon with a particular approach.

Where should eTEP fit?

We are not questioning the value of eTEP. It has become an important tool for complex abdominal wall reconstruction, particularly for large, multiple or difficult ventral defects where extensive retromuscular dissection may be justified to close the defect. Our concern is narrower: routine division of an intact PRS when that division adds little to the repair.The decision to divide the PRS should be deliberate and justified by anatomy and objectives of reconstruction. It should also be discussed openly with patient, balancing the expected benefits against potential anatomical and functional consequences as part of shared decision-making.

Daes appropriately calls for greater understanding of how the reconstructed abdominal wall adapts over time [1]. We would add a complementary question: in how many patients does this anatomy need to be reconstructed at all?

Future studies should therefore move beyond comparing PRS closure with non-closure after eTEP. Prospective comparisons of PRS-preserving techniques with eTEP rives stoppa for small ventral hernias are needed, incorporating objective measures of bulging such as Ellipse 9, patient-reported outcomes and wherever feasible, biomechanical and functional endpoints. Perhaps the next evolution of eTEP should not be simply to extend its indications, but to refine where its anatomical disruption is truly necessary.

The principle should be simple: restore what is deficient, but preserve what is intact. In abdominal wall reconstruction, the best surgery may sometimes be the one that achieves the repair while changing the least.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

MG developed the manuscript, and drafted the article. PK and SP conceived the idea, contributed to the critical revision of the

manuscript and intellectual content. All authors contributed to the article and approved the submitted version.

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