

Invited Commentary to: Abdominal Wall Reconstruction Utilizing the Combination of Absorbable and Permanent Mesh in a Retromuscular Position: A Multicenter Prospective Study

B. Ramana¹

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Posterior component separation/transversus abdominis Release (PCST/TAR) has now become a common buzzword in the field of hernia surgery, and the original indications have now been expanded to include lateral as well as flank/lumbar hernias.

While the open operation is still the sheet anchor of modern AWR, the minimally invasive variants (eTEP TAR being the most high profile and promising) [1] are giving surgeons and patients alike greater choices. Gone are the days when patients with large hernias would need plastic surgical referral and the problem considered solved by the general surgeon. Today, each surgeon interested in hernia surgery has multiple options to treat these difficult patients.

Since the procedure is complex, with a steep learning curve, there is a great possibility for the naive surgeon to cause severe and permanent harm to the patient while doing a TAR. Experts constantly advise surgeons to take their time and learn it formally. To this end, the results of the Spanish authors will encourage and stimulate thought and discussion [2].

The highlights of the technique, the so-called Madrid modification, include:

1. A bottom-up TAR
2. A large absorbable mesh (AM) is placed first on the peritoneal sac, over which a permanent mesh (PM) is used.

The bottom-up approach is not particularly exceptional today, with minimally invasive as well as robotic surgeons using it routinely these days.

The placement of two different implants may seem excessive to many, though the authors have done a creditable job by providing photographs to justify the logic and benefit of this. Most high-volume centres in the world doing this operation do not usually use both an absorbable mesh and a synthetic one, leaving this for special situations like inability to close large peritoneal tears. It remains to be seen whether re-operations are easier in this set of patients, as suggested by the authors' findings of a separable plane underneath the synthetic mesh.

Another interesting hypothesis that needs to be tested is whether the presence of an absorbable mesh on the posterior suture line helps prevent posterior rectus sheath (PRS) disruption with its potentially disastrous bowel obstruction. The stiffer AM may be a barrier between the small bowel that may come out through a torn posterior suture line and the PM laid out in the large retromuscular space.

The surprisingly high number (39%) of failed midline closures and wound occurrences in this series is not easily explained. The authors' disclaimers on this do not sound convincing to this reviewer. Also not easily digested is the claim that the use of AM + PM combo reduces central mesh rupture, a bugbear of previous studies (referenced by the authors). Two things that I would comment on this are: one, only polyester meshes used in previous TARs have fractured, and subsequently been recalled by the parent company, and secondly, even biological implants have not proven the premise of being replaced by a fibrous sheet that would prevent further hernias. So to think that AM would help in doing so is a little perplexing.

These matters should be resolved, and more studies, one suspects, would be coming in the future.

✉ B. Ramana
rambodoc@gmail.com

¹ Belle Vue Clinic, Kolkata, India

Till such time, this paper should be welcomed as providing more insights into the PCST/TAR operation, having raised interesting questions.

References

1. Belyansky I, Daes J, Radu V, Ramana B et al (2018) A novel approach using the enhanced-view totally extraperitoneal (eTEP) technique for laparoscopic retromuscular hernia repair. *Surg Endosc* 32(3):1525–1532. <https://doi.org/10.1007/s00464-017-5840-2>
2. García-Ureña MA, López-Monclús J, Cuccurullo D, et al (2018) Abdominal wall reconstruction utilizing the combination of absorbable and permanent mesh in a retromuscular position: a multicenter prospective study. *World J Surg*. <https://doi.org/10.1007/s00268-018-4765-9>