Surgery for vaginal vault prolapse: is autologous fascia a viable alternative to mesh?

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The surgical management of prolapse has undergone a meandering path, with innovation, controversy and legislation all being encountered en route. Some of the dust is now settling with respect to the role of mesh implant surgery, and whilst it continues to have albeit a contracted role, there is very much a new direction set on native tissue and non-mesh repairs with the advent of techniques such as laparoscopic suture hysteropexy, cervicopexy and colporrhaphy.

The authors of this paper present the largest series of women undergoing autologous fascia sacrocolpopexy for the treatment of moderate-severe prolapse. Learning from the past, two key questions that must always be answered when evaluating any new procedure are safety and efficacy. For both these measures, the authors show encouraging results comparable with current gold-standard, mesh augmented repairs.

The use of autologous fascia has been well established to treat women with urinary incontinence -the pubovaginal / rectus fascial sling (Mcguire EJ et al . Pubovaginal sling procedure for stress incontinence. J Urol. 1978;119:82–4) – the use of which has resurged following the widespread suspension of synthetic sling procedures. Reports of autologous fascial support of the vaginal vault however are limited to a few short-term case series.

This series involves 132 women, followed up for a median of 2.2 years; the authors present five-year data with comparable success rates to those reported in the landmark CARE study (Nygaard I, et al. Long-term outcomes following abdominal sacrocolopopexy for pelvic organ prolapse. JAMA. 2013 May 15;309(19):2016-24) without the complication of mesh erosion.

The mixed bag of patient types and concomitant surgery in this study underscores the myriad of pathology and presenting symptoms to the pelvic floor surgeon; sadly, this reality hinders forensic evaluation of the single procedure. It is noted that around three-quarters of the women in the study were having primary prolapse surgery, with a similar proportion undergoing some form of hysterectomy coupled with autologous fascial vault support. Other sacrocolopopexy series have involved women the majority who have already had primary procedures, are without a uterus and represent an already failed and perhaps more difficult to successfully treat group (Maher C, et al. Surgery for women with apical vaginal prolapse. Cochrane Database Syst Rev. 2016 Oct 1;10(10):CD012376.) The addition of a hysterectomy, as well as the harvesting of autologous fascia inevitably means a lengthening of procedure time compared to those usually quoted for women undergoing laparoscopic vault suspension procedures of hysteropexy or sacrocolopopexy.

The complexities of pelvic floor patients and their symptoms mean that additionally nearly 2/3 of the patients had Burch colposuspensions performed at the time of index surgery. The unpredictability of pelvic floor surgery on bladder symptoms is amply demonstrated by around 1/3 of women complaining of stress incontinence and a third suffering overactive bladder symptoms following the procedure. It's clear that functional improvements do not always go hand in hand with anatomical correction for the pelvic floor patient.

Many women remain alarmed by the adverse reports of mesh augmentation surgery in gynaecology (Izett-Kay ML, et al 'What research was carried out on this vaginal mesh?' Health-related concerns in women following mesh-augmented prolapse surgery: a thematic analysis. BJOG. 2021 Jan;128(1):131-139). Contemporary best practice involves distilling out irrefutable principles such as recognising the importance of appropriate apical support which is usually optimally achieved abdominally, as well as an awareness of risks of surgery, careful counselling regarding mesh and being able to offer evidence-based alternatives. This paper provides valuable long-term data for a further promising meshless surgical technique.