## LETTER TO THE EDITOR

## Traditional native tissue vs mesh-augmented pelvic organ prolapse repairs: providing an accurate interpretation of current literature. Reply

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## Dear Editor,

We appreciate the opportunity to respond to the letter to the editor by our Australian colleagues, which questions our conclusions regarding the success rates for anterior colporrhaphy; asks how one should provide informed consent; comments on the role of expert witnesses; and concludes by claiming that our results are a distortion and that we lack an understanding of the multiple biases that influence the reporting of surgical outcomes in the literature. They indicate that their comments are based on their interpretation of four RCTs that report success rates for anterior colporrhaphy of 30–71% [1–4], and they consider these results to be "realistic" because they are similar to their own published literature, which is not derived from an RCT [5].

Dietz and colleagues have pointed out the exact issue at hand and the reason for our review, which is that there is a great deal of variation in the results of POP surgery and in the use of the literature attempting to draw conclusions about the success of POP surgery. We recognize that RCTs are considered the gold standard in clinical research. However, the nature of surgical practice and the breadth and quality of research in POP surgery are severely limited at this time. Concern has been raised that the hierarchical view of research design has evolved into a dichotomous view and that RCTs cannot be considered the only valid information upon which to base conclusions [6]. One of the biggest problems in POP research is how to choose the most clinically relevant outcomes measure. The POP-Q appears to be unreliable in post-operative follow-up assessments.

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202 North Division Street,
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e-mail: ejs222@aol.com Barber et.al. [7] published a very thoughtful paper showing the vast differences when the CARE trial data were analyzed using 18 different methods. The range of success ranged from 19.2 to 97.2% when objective and subjective methods are used. The use of POP-Q and Baden–Walker anatomical methods was found to be the least favorable. Knowing there is a lack of standardization and overall quality in the current POP literature, our goal in our paper was to provide a comprehensive review that was not limited by the restrictive criteria of a systematic review in order to utilize as much information as possible to draw meaningful conclusions concerning POP surgery success rates.

Dietz et al. have provided one of the classic examples of the inaccurate use of information from RCTs in POP surgery by referencing the study published by Weber et al. [1]. The authors re-published the study using currently accepted outcome measures and showed a success rate of 89% for anterior colporrhaphy, rather than the 30% that is often quoted. It is our view that referencing the original Weber paper as evidence of poor outcomes with native tissue repairs is inaccurate and misleading and we suggest that this study should no longer be referenced in the literature without also referencing the follow-up study reported by Chmielewski et al. [8]. Similarly, the remaining studies referenced are subject to variation in interpretation depending on which of the composite outcomes is utilized. This is but one example of how results in the literature, including RCTs, are subject to a wide variation in interpretation. Again, we would argue that, at the present time, limiting interpretations of success rates for POP surgery to only RCTs does not provide an accurate interpretation of the literature. Further, surgical technique is very important, as we also attempted to point out. We know that apical support is crucial to anterior compartment support. However, often quoted studies either did not support the apical compartment [9] or, perhaps, did so intermittently [3].

As far as informed consent is concerned, we believe that this was stated fairly clearly in the manuscript: "Informed consent should include a non-biased discussion of the relative success of all approaches to POP, and the reconstructive surgeon should be able to offer all appropriate repairs, with evidence-based information concerning expected success and complication rates, as well as information about the individual outcomes each surgeon has with each technique." [10]. If those outcomes indicate a 30% success rate, the surgeon is obliged to inform the patient of this fact and should also inform the patient that others have reported higher success rates in the literature. We would consider it unethical to suggest that a 30% success rate for anterior colporrhaphy is acceptable and is supported by the literature. We believe that our comprehensive review, based on several studies, supports the conclusion that the range of success regarding anterior colporrhaphy is at least 70-90% when surgical technique and currently accepted composite outcomes are considered.

As surgeons still learning and honing our craft, we will pass on comments about our roles as expert witnesses for obvious reasons. In terms of the claim that we lack an understanding of the multiple biases that influence the reporting of surgical outcomes in the literature, we find it ironic and unfortunate that our esteemed colleagues reached their own conclusion based on an inaccurate interpretation of a limited portion of the available literature concerning POP surgery. It would seem that they have missed the entire point of our review, which was to call into question the very type of interpretation they have performed. However, in doing so, they have confirmed the need for comprehensive reviews and analyses that take into account all available information, such as the review we provided.

## References

- Weber AM, Walters MD, Piedmonte MR, Ballard LA (2001) Anterior colporrhaphy: a randomized trial of three surgical techniques. Am J Obstet Gynecol 185(6):1299–1304
- Gandhi S, Goldberg RP, Kwon C et al (2005) A prospective randomized trial using solvent dehydrated fascia lata for the prevention of recurrent anterior vaginal wall prolapse. Am J Obstet Gynecol 192(5):1649–1654
- Nguyen JN, Burchette RJ (2008) Outcome after anterior vaginal prolapse repair: a randomized controlled trial. Obstet Gynecol 111 (4):891–898
- Altman D, Falconer C (2007) Perioperative morbidity using transvaginal mesh in pelvic organ prolapse repair. Obstet Gynecol 109 (2 Pt 1):303–308
- Dietz HP, Chantarasorn V, Shek KL (2010) Levator avulsion is a risk factor for cystocele recurrence. Ultrasound Obstet Gynecol 36:76
- Concato J, Shah N, Horwitz RI (2000) Randomized, controlled trials, observational studies and the hierarchy of research designs. N Engl J Med 342(25):1887–1892
- Barber MD, Brubaker L, Nygaard I et al (2009) Defining success after surgery for pelvic organ prolapse. Obstet Gynecol 114 (3):600–609
- Chmielewski L, Walter MD, Weber AM, Barber MD (2011) Reanalysis of a randomized trial of 3 techniques of anterior colporrhaphy using clinically relevant definitions of success. Am J Obstet Gynecol 205(1):69.e1–69.e8
- Niemenen K, Hiltunen R, Takala T et al (2010) Outcomes after anterior vaginal wall repair with mesh: a randomized, controlled trial with a 3-year follow-up. Am J Obstet Gynecol 203(3):235.e1–235.e8
- Stanford EJ, Cassidenti A, Moen MD (2012) Traditional native tissue versus mesh-augmented pelvic organ prolapse repairs: providing an accurate interpretation of current literature. Int Urogynecol J 23(1):19–28