Commentary on “Voided volume for postoperative voiding assessment following prolapse and urinary incontinence surgery”

Abdelmageed Abdelrahman¹

Received: 10 September 2020 / Accepted: 27 September 2020 / Published online: 13 October 2020
© The International Urogynecological Association 2020

This prospective study was carried out between September 2011 and June 2014. The cohort included all women who underwent procedures for pelvic floor disorders and required postoperative voiding assessment. The authors aimed to compare the safety and accuracy of voided volume with the standard retrograde fill approach for voiding assessment after pelvic floor surgery. One surgeon utilised a spontaneous voiding protocol and allowed any patient who voided 150 ml or more within 6 h to pass the trial. Retrograde fill was not used in the spontaneous voiding method; however, 300 ml of cystoscopy fluid was left in the bladder intentionally after outpatient midurethral sling procedures to expedite a full bladder feeling after surgery. Another surgeon strictly used a retrograde fill method, whereby the bladder was instilled with 300 ml of normal saline or sterile water via a catheter or until maximum capacity was reached. After removal of the catheter, one voided volume of 200 ml within 60 min was considered to pass the trial. The primary outcome of the study was the “failure rate”; the percentage of women who required catheterisation for voiding dysfunction before discharge from hospital. Exclusion criteria included women who needed a catheter placement because of a bladder injury or suprapubic catheter.

A total of 431 women were in the spontaneous voiding method group and 318 women in the retrograde fill method group. The majority of women in the two groups underwent surgery for prolapse (with significantly more in the spontaneous voiding group). The retrograde filling group included

more women undergoing a midurethral sling procedure (specifically retropubic sling placement) than the spontaneous voiding group. The failure rates were similar in the spontaneous voiding group (20%) and the retrograde fill group (22.8%). Among women who passed the trial, there was a similar number of women who returned with urinary retention and required catheter insertion: 0.9% in the spontaneous voiding group and 1.6% in the retrograde fill group. The authors therefore concluded that a spontaneous voiding trial based on a minimum voiding volume of 150 ml was safe and reliable compared with retrograde filling after female pelvic floor procedures.

A strength of this study was the large sample size with similar baseline characteristics between the two groups. Limitations of the study include lack of randomising and blinding, which carries a risk of bias. Another limitation was that results are only applicable for the abovementioned procedures, and therefore cannot be applied to other procedures such as autologous fascial slings, which are known to entail higher risks of voiding dysfunction.

Compliance with ethical standards

Conflicts of interest None.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

✉ Abdelmageed Abdelrahman
abdelmageed@hotmail.co.uk

¹ Department of Urogynaecology, Liverpool Women's Hospital NHS Foundation Trust, Liverpool, UK