Creating the surgical platform for patients with deeply infiltrating endometriosis: results from the first sonovaginography centre in Western Australia

A Thottungal, E Dillon, K Karthigasu, M Zachariah, B Thyer, B McElhinney, R Hodder, R Goodwin, D Hince, M Bulsara

Aim: To evaluate the efficacy and accuracy of sonovaginography (SVG) along with bowel preparation for assessment of deeply infiltrating endometriosis (DIE), by comparing with MRI imaging and surgical findings.

Design: Retrospective study during the time period July 2013 to June 2018.

Setting: Specialist O & G ultrasound practice.

Inclusion: Patients suspected of DIE at pelvic scan.

Exclusion: Patients with no suspicion of DIE on routine pelvic scan for any indication.

Results:

- 56/146 (38%) patients had bowel lesions, of which 34/56 (61%) reported at least one bowel symptom. 90/146 (62%) did not have bowel lesions, of which 50/90 (51%) reported bowel symptoms.

- No association was found between the detection of bowel lesions and reporting of at least one of the symptoms ($r^2(1) = 0.13, p = 0.257$).

- Mean length of bowel traced = 29.5 cm (15-52 cm).

- 10/56 (18%) had skip bowel lesions.

- The level of highest lesion seen at 38 cm.

Strengths:

- One of the larger studies on this topic.

- Heterogeneous group - 29/146 (20%) i.e. 1 in 5 had no suspicion of endometriosis on referral.

- All USS done in a specialist Obs & Gynaec ultrasound clinic (previous studies from tertiary hospitals).

- ?Better representation of what is actually in the community.

Limitations:

- Retrospective design.

- Multiple surgeons with different skill levels and reporting styles.

- May not translate easily to all ultrasound units.

Conclusion: The findings are consistent with previous studies, which can be reproduced in a stand alone clinic. A routine pelvic scan is a good screening tool for suspecting DIE in patients with any gynaecological symptoms. Bowel preparation is helpful in easy identification of bowel lesions and tracing of ureters up to pelvic brim.