Learning curve for detection of the distal part of ureters by transvaginal sonography: a feasibility study

Objective
To investigate how many examinations takes to be able to identify the distal part of normal ureters on transvaginal sonography (TVS)

Methods
- Prospective study. Outpatient clinic, tertiary referral setting.
- Three trainees (T1, T2, T3).
- Expert examiner (GH) performed standardized gynecological TVS with visualization of the pelvic part of both ureters. One of the three trainees who did not take part in the initial examination attempted to identify both ureters. A time limit was set to 150 seconds for successful identification of each ureter.
- Competency level assessed using learning curve cumulative summation (LC-CUSUM).

Results
Fig 2. Left ureter identified after 50 TVS examinations (inter-trainee variability 27-50).
Fig 3. Right ureter identified after 48 TVS examinations (inter-trainee variability 34-48).

Conclusion
• Sonographers and/or gynecologists familiar with gynecological TVS should be able to become proficient in identifying both ureters after 48-50 TVS examinations.
• Detection of ureters is a feasible part of the TVS workup of patients attending a tertiary referral center clinic.