Hypothesis / aims of study
Tension free mid-urethral slings are becoming the gold standard treatment for female stress urinary incontinence (SUI). Although several techniques exist to place mid-urethral slings, the trans-obturator approach is becoming increasingly popular. A paucity of data, however, are available on the outcomes of trans-obturator sling placement. We assessed the early results of slings placed via the trans-obturator approach (TVT-O, Gynecare, Somerville, New Jersey) for SUI in women with high (> 60 cm/H2O) and low (< 60 cm/H2O) Valsalva leak point pressure (VLPP).

Study design, materials and methods
Forty-three women with urodynamically proven SUI underwent TVT-O. Mean patient age was 59 years (range 36 - 86). Prior anti-incontinence or pelvic prolapse procedures had been performed on 21/43 (49%) patients. Average follow up was 10 weeks (range 2-26). Following TVT-O, patients were assessed based on degree of postoperative SUI and placed into one of three categories – dry (no pads/no SUI), improved (> 50% improvement as compared to preoperative SUI) and failed (< 50% improvement as compared to preoperative SUI).

Results
Overall, 27/43 (63%) women were dry, 12/43 (28%) improved and 4/43 (9%) unchanged following TVT-O for SUI. When stratified based on preoperative VLPP, 24/30 (80%) patients with high VLPP were dry, 6/30 (20%) improved and 0/30 (0%) unchanged. 3/13 (23%) women with low VLPP were dry, 6/13 (46%) improved and 4/13 (31%) failed after TVT-O placement. No intraoperative complications were noted. Short-term urinary retention treated with clean intermittent catheterization occurred in 2/43 (5%) patients. De novo urinary urgency and urge incontinence requiring medical therapy were reported in 4/43 (9%) and 2/43 (5%) women, respectively.

Interpretation of results
Patients with preoperative VLPP > 60 cm/H2O demonstrate an 80% dry rate following TVT-O as compared to 20% of women with VLPP ≤ 60 cm/H2O.

Concluding message
With limited follow up, TVT-O appears to be a safe and effective surgical treatment for female SUI producing excellent results in patients with VLPP > 60 cm/H2O. Patients with low VLPP may consider conventional, retropubic mid-urethral slings as treatment for SUI.