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Novel Single Incision Vaginal Approach To Treat Cystocele and Vault Prolapse through an Anterior Approach with an Anterior Wall Mesh Anchored Apically to the Sacrospinous Ligaments (Anterior Elevate System)

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Study Objective: To analyze the safety and early efficacy of a new technique to treat cystocele and concomitant vault prolapse through a single vaginal incision with a lightweight mesh anchored apically to the sacrospinous ligaments.

Design: Retrospective analysis over 18 consecutive months.

Setting: Large tertiary care hospital with University affiliation.

Patients: Over 40 consecutive patients.

Intervention: Women with cystocele and/or apical prolapse > Stage II underwent repair through a single anterior vaginal wall incision with the Anterior Elevate System (AMS). The technique utilizes a lightweight (24 g/m2) Type I mesh anchored to the sacrospinous ligaments via two mesh arms with small self-fixating tips. The bladder neck portion of the graft is anchored to the obturator internus with similar self-fixating tips. The apical portion of the graft is adjustable to vaginal length prior to locking in-place. Outcome measures included prolapse degree at last follow-up visit, intra/post-operative complications, and QOL assessments.

Measurements and Main Results: Follow-up was between 3 and 18 months. Mean pre-op Ba was +1.75 (+/-1.58) and C -2.37 (+/-2.98). Average blood loss was 45cc and average hospital stay was 23 hours. There were no intra-operative complications and no bladder perforations nor any blood transfusions given. 57% of patients had concomitant minisling for SUI. Mean post-op Ba is -2.47 (+/-0.35) and C -8.0. There was no statistical difference in pre- to post-op TVL. Objective cure rate at current follow-up is 92.3% (\/= Stage 1) and no patients have symptomatic failure or have required re-operation. To date there have been no mesh extrusions. No patients have reported significant buttock or leg pain. One patient reported vaginal pain at 6 mos that resolved with physical therapy.

Conclusion: The Anterior Elevate system is a novel technique to treat cystocele and vault prolapse through a single vaginal incision. Initial results show the procedure to be safe and early efficacy is promising. Longer-term follow-up is ongoing.