

**TRANS VAGINAL MESH : ARGENTINE EXPERIENCE OVER 220 CONSECUTIVES CASES.**

Hypothesis / aims of study . Vaginal prolapse is common in adults and parous women. The classic surgeries have a high possibility of recurrence. This had led to new techniques for reducing the recurrence. The use of tension free vaginal polypropylene mesh may be a treatment option . However, in the surgical treatment of prolapse requires a larger mesh. This motive could increase the possibility of extrusion mesh in the vaginal mucosa. Using kit allows standardize the technique and minimize complications. To know the benefits of using mesh in the correction of prolapses studies are needed to determine complications and long follow-up.

We hypothesise that the use of polypropylene mesh is safety and effective for treating female prolapse. The aim of this study was to assess the anatomical and functional results of the transvaginal repairing of prolapses with the Prolift device.

Study design, materials and methods

This prospective and observational study included 220 consecutives patients from two centres. They were operated on between June 2006 and December 2009. 71 (32%) patients had a stage IIIBa prolapse, 71 (32%) had a stage IIIC prolapse, 23 (11 %) patients had a stage IIIBp prolapse, 53 (24 %) had a stage IV prolapse and only 2 (1%) had a stage II recurrent prolapse.

The post surgery follow up was 10.6 months average (range 3-38 months).

Post surgery assessment included: POP- Q and recording de novo appearance of SUI, IOU, dyspareunia, constipation, pelvis pain, cicatrisation defects, retractions and new surgery procedures. This control was carried out by a doctor who was not the surgeon.

Average age of patients was 63 years old (40-81), average parity was 3 and 91 % were post menopause. A total mesh was used on 51 patients (23,1%), an anterior mesh was used on 62 patients (28.2%), a posterior mesh was used on 33 patients (15,1%) and both anterior and posterior meshes were used on 74 patients (33,6%).

29 patients (13.2%) had undergone a previous hysterectomy, a vaginal hysterectomy was performed on 22 patients (10%) during the procedure and on 169 patients (76.8%) the uterus was preserved.

Other vaginal procedures without mesh together with Prolift were performed on 27 patients

Patients in stages POP-Q 0 or 1 were considered cured, those in stage 2 asymptomatic were considered improved, and those in stage 2 with symptoms or >2 were considered failed.

Results

198 patients (90%) were cured, 17 patients (7,7%) improved and in 5 patients (2,3%) the procedure failed. From the anatomical point of view the recurrences (POP-Q 2 o >) were: Anterior defect: (stage 2) 6 cases (2.7%). Apical defect: (stage 2) 8 cases (3,63 %) and (stage 3) 3 cases (1,36%). Posterior defect: (stage 2) 5 cases (2.27%).

Furthermore, de novo SUI: 7cases (3,18 %), dyspareunia: 7 cases (3,18%), de novo urgency: 10 cases (4,54 %)

Haematomas: 2 cases (0,9 %), one that needed reoperation to drain the haematoma were observed. There were 2 (0,9 %) surgeries performed due to recurrences.

There were 31 cases (14.1%) with cicatrisation defects, all of them within the first 3 months of follow up.

There were 40 cases (18.2%) of retractions, all of them asymptomatic, except 3 who experiences pain on palpation.

Uterus preservation on patients with apical defect was successful on 158 patients (93,5%).

Interpretation of results The use of mesh in the surgical correction of female genital prolapse is not free of complications. In our experience, only one complication was important corresponding to hematoma in the prevesical space with hemodynamic compromise. We not observed rectal, bladder, neurological and high vessels lesions During the late postoperative time the most frequent complication was related with the mesh. Extrusion and erosion in the vaginal mucosa was recorded in 14.1% (31 cases). 11 cases were successfully treated only with oestrogen cream, 10 cases required excision in office and 10 cases required ambulatory surgical excision of the extrusion mesh in operating room. One of the major concerns that industry should take in the future is to provide mesh for anatomic correction reducing the rates of extrusion. However, we must not forget that several factors contribute to the vaginal erosion rates. The characteristics such as oestrogen deficiency, age and implant size are important for successful results. Furthermore the technique and the learning curve are very important in the decreased of the mesh related complications. For this reason is important choose the surgical technique, the mesh and the appropriate patient. The women undergoing transvaginal prolapse repair with the Prolift system showed significant improvement during the follow-up with objective measures by POP-Q quantification observing 90 % of anatomical cure . No doubt that longer follow-up is required to determine the persistence of these results, after the year new cases of recurrence were recorded in our series. According our experience the Prolift system is successful in the treatment of cystocele, rectocele and vaginal cuff prolapse. Other publication compared the anatomic outcomes of Prolift with uterosacral ligament suspension and abdominal sacrocolpopexy for pelvic organ prolapse concluding similar results between the three techniques. The main advantage of surgical treatment of genital prolapse using Prolift consists in a low percentage of total recurrence.

Concluding message

Prolift device is a successful option to preserve the uterus of patients suffering 3rd or 4th degree hysterocoele. Following the results observed after a 10,6 month follow up, it would appear that the Prolift device is safe and effective to treat high degree prolapses. Notwithstanding this, the results must be confirmed on the long term.

#### References

1. Sansen TV, Shahryarnejad A, Molden S, Hoskey KA, Abbasy S, Patterson D, Saks EK, Weber Lebrun EE, Gamble TL, King VG, Nguyen AL, Abed H, Young SB; Fellow's Pelvic Research Network. Anatomic outcomes of vaginal mesh procedure (Prolift) compared with uterosacral ligament suspension and abdominal sacrocolpopexy for pelvic organ prolapse: a Fellows' Pelvic Research Network study.. Am J Obstet Gynecol.2009;201(5):519-e1-8.

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<b><i>This study did not require ethics committee approval because</i></b>	<b>Is an observational and prospective studie</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
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