

REDUCTION OF THE MESH IMPLANTS SURFACE AREA WITH PELVIC ORGAN PROLAPSE SURGICAL REPAIR

Hypothesis / aims of study

This study aimed to evaluate the surface area reduction up to skeletonization of pelvic floor reinforcement mesh implants.

Study design, materials and methods

95 women, mean age 65, with advanced pelvic floor prolapse, referred for mesh reconstruction, were enrolled to this study from January 2012 to March 2013. Mean follow up duration was 15 months. For these patients were the mesh implants skeletonized to a ligamentary framework. Study model was the Prolift mesh (J&J, Summerville, USA), either anterior or posterior, reduced to 75% of the original surface area by cutting out oval mesh material from the central body of the mesh. Patients were interviewed and examined and subjective data regarding urinary and fecal urgency, frequency, stress and urge incontinence were obtained at the end of the first and 6th post-operative months, and interviewed again at the study conclusion. For the subjects also a standardized examination was performed, including height, weight, and pelvic floor support assessment by using the pelvic organ prolapse quantification system (POP-Q). Point bi-serial correlation coefficient was used to calculate P values for changes from baseline to post-operative parameters. Significance has been set for a value of $P < .05$.

Results

The POP-Q points measurements showed marked improvements: the average delta for the Ba point was 7.51 cm, for the Bp point it was 2.69 cm, and for the C point the delta was 6.72 cm (Table 1).

Interpretation of results

These measurements were all statistically significant ($p < .0001$). Bladder overactivity symptoms, namely urgency, frequency and nocturia, were all found to be reduced significantly (Tab.2). Fecal incontinence, pelvic pain and constipation rates were reduced as well. No adverse effects related to the dissection or mesh implantation were marked. The first and sixth post-operative months follow-up records as well as the study conclusion interview findings were satisfactory in terms of subjective and objective cure and adverse effects occurrence.

Concluding message

This rather small patient's study group data proposes that skeletonizing meshes might be safely and successfully implanted for potentially improved pelvic floor reconstruction.

Table 1: POPQ measurements before and after surgery

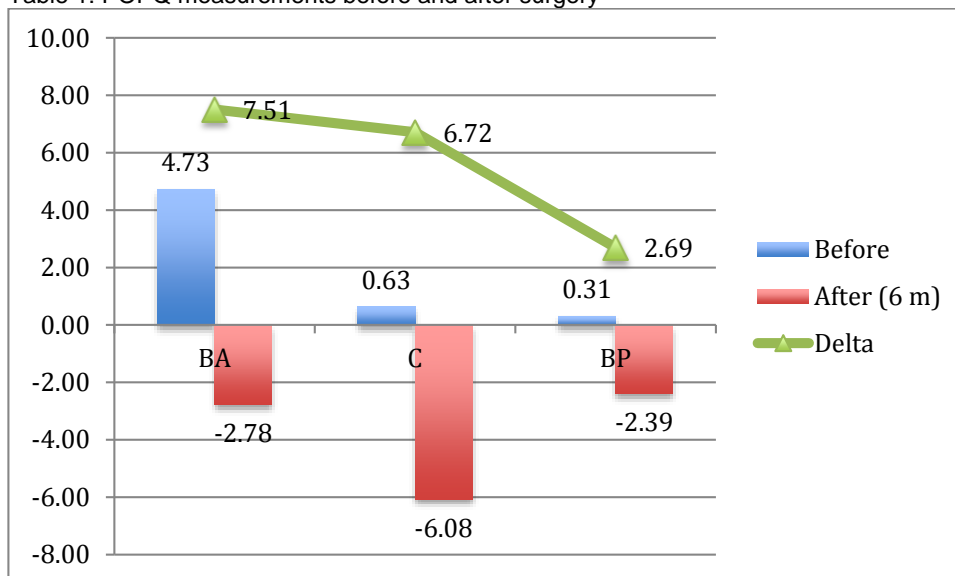
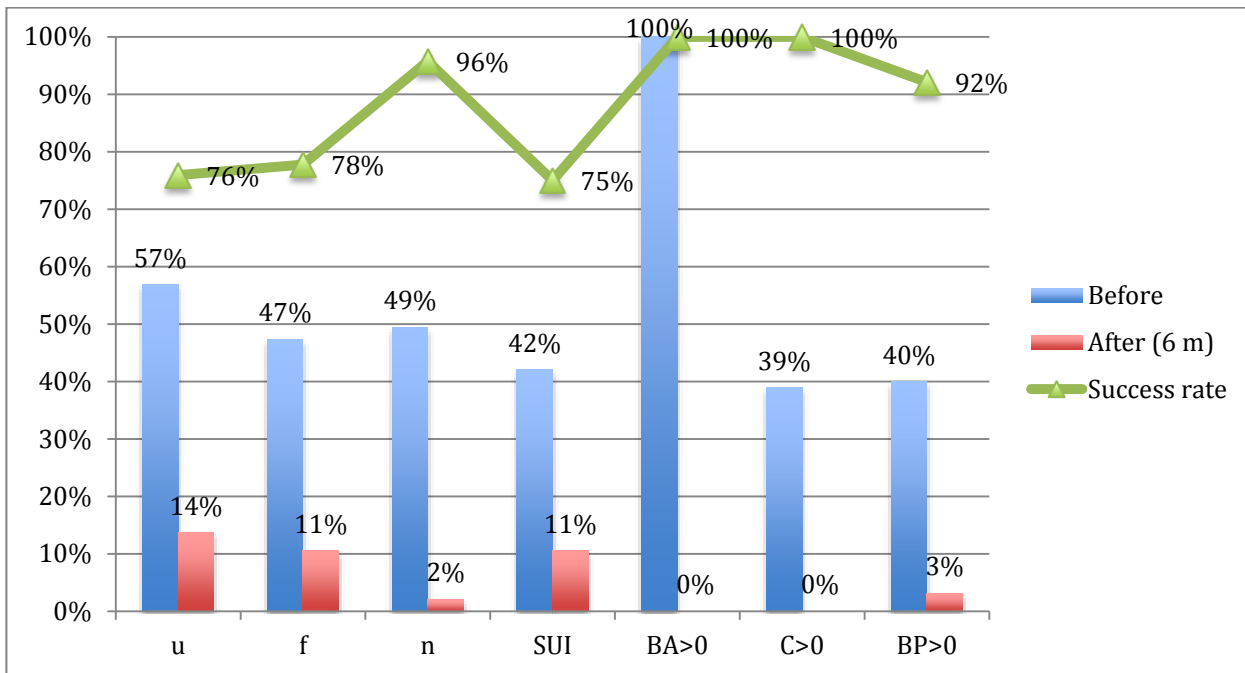


Table 2: Pelvic organ functions before and after surgery.



Disclosures

Funding: no financial disclosure **Clinical Trial:** Yes **Public Registry:** No **RCT:** Yes **Subjects:** HUMAN **Ethics Committee:** Moscow Medical Stomatological University, Urology Department, Russia **Helsinki:** Yes **Informed Consent:** Yes