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THE POP REPAIR USING TRANSVAGINAL MESH IMPROVES THE QOL

Hypothesis / aims of study

The most important achievement of last decades in pelvic organ prolapse management seems to be the introduction of transvaginal mesh techniques, which should be able to prevent recurrences not reducing quality of life after the operation. (1) The assessment of QoL becomes essential part of any study evaluating the results of reconstructive surgical procedures as subjective patient's comfort seems to be superior to the optimal anatomic effect. (2)

The objective of our study is a comparison of QoL after different techniques of prolapse surgery. The operations under discussion were Prolene transvaginal meshes (Prolift anterior, posterior and total) and sacrospinous fixation Amreich-Richter (SSF).

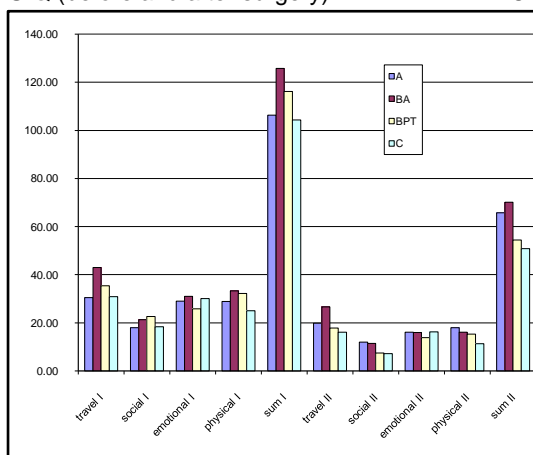
Study design, materials and methods

Prospective, multicentre study with set of 361 patients divided according to the prevailing type of descent. In our study were included: Group A - 125, Group B - 123, Group C - 113, together 361 patients. We used Prolift anterior in 125 patients (A), methods of vaginal cuff suspension in 113 cases (B), of which Prolift total (BPT) in 83 and sacrospinous fixation (BA) in 40 patients and Prolift posterior in 123 patients (C). Examination set up comprises of history including QoL questionnaires, urodynamics, ultrasound and MRI (group B). All patients filled in questionnaires preoperatively and three months after the surgery. PISQ12 (pelvic organ prolapse/urinary incontinence sexual function questionnaire) with 12 items, scores 0-48. UIQ (urinary tract functions), CRAIQ (bowel functions) and POPIQ (pelvic organs prolapse symptoms perception) each with 31 items and scores from 0 to 400. Duration of surgery, intraoperative, early and late complications rate of standardized operations have been documented and statistical evaluation followed (contingent squares, parametrical analysis for quantitative magnitude levels, classic regression analysis and logistic regression with SAS 9 pack ANOVA and t-tests).

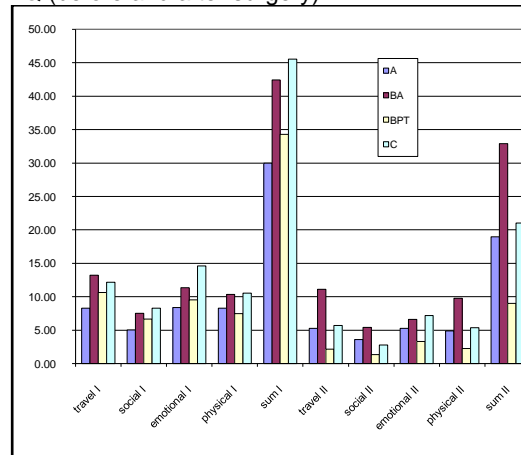
Results

The demographic data show the homogenous distribution with the exception of BMI in group C, which shows higher values (P=0,025)

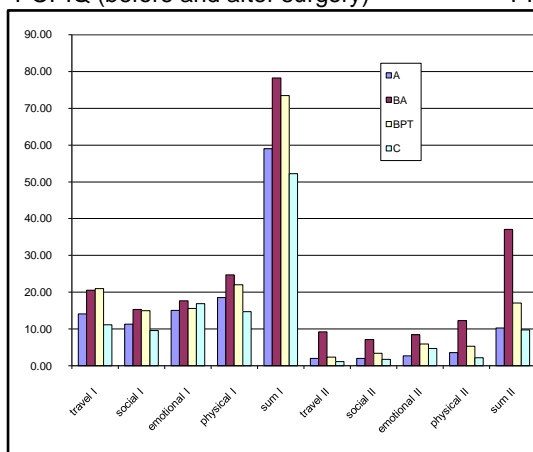
UIQ (before and after surgery)



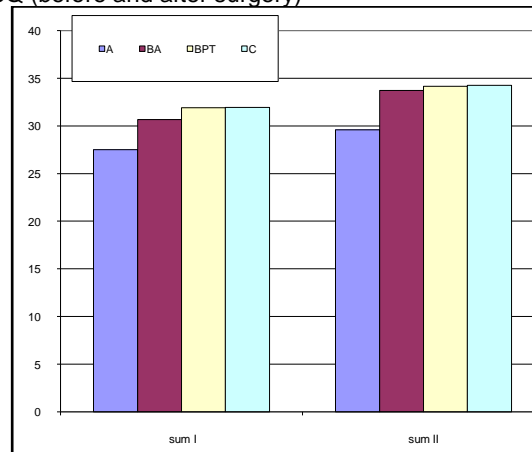
CRAIQ (before and after surgery)



POPIQ (before and after surgery)



PISQ (before and after surgery)



Interpretation of results

Concerning the evaluation of QoL questionnaires, following results of statistical comparison were found: As shown in the graphs of the parameters before and after the procedure (3 months follow up) there were statistically significant differences in mean quality of life. There was significant improvement in all the group in UIQ and POPIQ. The results of CRAIQ in group A as expected remain the same as the method doesn't compromise the posterior compartment. The absence of such positive change in bowel disorders perception in SSF group remains to be explained. The reason might be explained by small group bias. PISQ - no significant difference between the domains of sexual life before and after the operations was proven.

Concluding message

According to our results novel transvaginal mesh techniques for the treatment of prolapse have unquestionable benefit on quality of life with an acceptable rate of complications.

References

1. van Raalte, HM, et al.: One-year anatomic and quality-of-life outcomes after the Prolift procedure for treatment of posthysterectomy prolapse. Am J Obstet Gynecol. 2008
2. Lowman, JK, et al.: Does the Prolift system cause dyspareunia?. Am J Obstet Gynecol. 2008

<i>Specify source of funding or grant</i>	This project was supported by the Grant IGA of The Ministry of Health of the Czech Republic No. 9309-3.
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	Yes
<i>Specify Name of Public Registry, Registration Number</i>	Our study was registered at FDA (evidence number NCT00572702, www.clinicaltrials.gov).
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Ethics Committee of the University Hospital Na Bulovce, Prague, Czech Republic.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes