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CAN WE PREDICT FEMALE SEXUAL FUNCTION AFTER REPAIRING PELVIC ORGAN PROLAPSE WITH MESH?

Hypothesis / aims of study

Pelvic organ prolapse (POP) affects sexual function. However, after mesh surgery, the results vary widely. This study was performed to evaluate female sexual function after placement of surgical mesh for anterior POP.

Study design, materials and methods

We retrospectively evaluated our prospective database of 134 women that were submitted to mesh surgery for anterior POP between 2008 and 2012. Only 65 were willing to participate in this study. Epidemiological and clinical data were collected and sexual function was evaluated with the female sexual function index (FSFI) questionnaire. A minimum of 12 months follow-up was required. Statistical analysis was done with Spearman's rho and Mann-Whitney U test.

Results

The mean age was $65,6 \pm 9,8$ years; 87% were on their menopause, 25% had diabetes, 41% had depression and 36% had done hysterectomy.

This was the first surgery to resolve anterior POP in 95% of the women. Before the surgery, younger women had lower expectations about their sexual function after mesh surgery (p=0.042).

Regarding the FSFI questionnaire, age had a negative correlation with every FSFI domain (p<0,0001). In contrast, education had a positive correlation (p<0,0001).

Women whose sexual expectations after POP correction were an important part of the decision had more arousal (p=0,002), more lubrication (p<0,0001), better orgasms (p=0,002), were more satisfied (p=0,005) and had less pain (p=0,003).

In contrast, women who had done hysterectomy (p=0,004) or were on their menopause (p<0,0001) had less desire.

There was no relation between having post-op complications and the FSFI score.

Patients who discussed about their sexual function with their urologist had more desire (p=0,002).

Cronbach's Alpha was 0,969, and "Cronbach's Alpha if Item Deleted", for every analysed variable was very high (always over 96,6%).

| Asymp. Sig (2-tailed) | Desire | Arousa | Lubrication | Orgasm | Satisfaction | Pain |
|--|--------|--------|-------------|--------|--------------|-------|
| Menopause | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.002 |
| Diabetes | 0.500 | 0.319 | 0.258 | 0.199 | 0.363 | 0.094 |
| Physical exercise | 0.317 | 0.842 | 0.591 | 0.822 | 0.668 | 0.355 |
| Depression | 0.916 | 0.914 | 0.757 | 0.818 | 0.749 | 0.698 |
| Hysterectomy | 0.004 | 0.027 | 0.272 | 0.062 | 0.019 | 0.527 |
| 1 st POP surgery | 0.177 | 0.755 | 0.923 | 0.627 | 0.365 | 0.814 |
| Recurrent UTI | 0.011 | 0.001 | 0.004 | 0.002 | 0.003 | 0.003 |
| Active worker | 0.003 | 0.020 | 0.095 | 0.019 | 0.017 | 0.097 |
| POP affected sexual function | 0.199 | 0.018 | 0.088 | 0.058 | 0.060 | 0.016 |
| Current sexual partner | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Patient with disease that affects sexual function | 0.374 | 0.412 | 0.252 | 0.462 | 0.516 | 0.383 |
| Partners has disease that affects sexual function | 0.113 | 0.016 | 0.033 | 0.017 | 0.063 | 0.034 |
| Discussed sexual function with urologist before surgery | 0.222 | 0.386 | 0.888 | 0.803 | 0.458 | 0.577 |
| Discussed sexual function with partner before surgery | 0.242 | 0.751 | 0.914 | 0.493 | 0.985 | 0.547 |
| Sexual function after surgery was important in the decision making | 0.389 | 0.464 | 0.802 | 0.637 | 0.603 | 0.279 |
| Post-op complications | 0.983 | 0.320 | 0.744 | 0.513 | 0.256 | 0.558 |
| Discussed sexual function with urologist after surgery | 0.002 | 0.058 | 0.248 | 0.135 | 0.074 | 0.296 |
| Time until sexual intercourse | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Urine loss during sexual intercourse | 0.677 | 0.123 | 0.125 | 0.125 | 0.228 | 0.055 |

| Spearman's rho | | Desire | Arousal | Lubrication | Orgasm | Satisfaction | Pain |
|----------------|-------------------------|----------|----------|-------------|----------|--------------|----------|
| Age | Correlation coefficient | -0.530** | -0.581** | -0.450** | -0.531** | -0.493** | -0.446** |
| | Sig (2- tailed) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | N | 65 | 65 | 65 | 65 | 65 | 65 |
| Height | Correlation coefficient | 0.143 | -0.010 | -0.034 | 0.004 | -0.035 | -0.190 |
| | Sig (2- tailed) | 0.256 | 0.937 | 0.788 | 0.974 | 0.782 | 0.130 |
| | N | 65 | 65 | 65 | 65 | 65 | 65 |

| | Correlation | -0.146 | -0.173 | -0.130 | -0.134 | -0.175 | -0.080 |
|---|-------------------------|----------|----------|----------|----------|----------|----------|
| Weight Deliveries | coefficient | -0.140 | -0.173 | -0.130 | -0.134 | -0.173 | -0.000 |
| | Sig (2- tailed) | 0.244 | 0.169 | 0.300 | 0.285 | 0.162 | 0.525 |
| | N | 65 | 65 | 65 | 65 | 65 | 65 |
| | Correlation coefficient | 0.069 | 0.026 | 0.102 | 0.040 | 0.010 | 0.142 |
| | Sig (2- tailed) | 0.586 | 0.835 | 0.420 | 0.754 | 0.938 | 0.258 |
| Cesarian sections | N | 65 | 65 | 65 | 65 | 65 | 65 |
| | Correlation coefficient | -0.118 | -0.027 | 0.038 | -0.020 | -0.014 | 0.109 |
| | Sig (2- tailed) | 0.348 | 0.829 | 0.767 | 0.872 | 0.915 | 0.338 |
| | N | 65 | 65 | 65 | 65 | 65 | 65 |
| | Correlation coefficient | -0.040 | -0.051 | -0.086 | -0.048 | -0.055 | 0.019 |
| Eutocic deliveries | Sig (2- tailed) | 0.752 | 0.688 | 0.497 | 0.702 | 0.661 | 0.878 |
| | N | 65 | 65 | 65 | 65 | 65 | 65 |
| | Correlation coefficient | -0.630** | -0.593** | -0.504** | -0.517** | -0.422** | -0.437** |
| Profession | Sig (2- tailed) | 0.000 | 0.000 | 0.001 | 0.000 | 0.005 | 0.004 |
| Education | N | 42 | 42 | 42 | 42 | 42 | 42 |
| | Correlation coefficient | 0.561** | 0.618** | 0.649** | 0.661** | 0.593** | 0.478** |
| | Sig (2- tailed) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | N | 65 | 65 | 65 | 65 | 65 | 65 |
| Sexual function expectations after POP correction | Correlation coefficient | 0.214 | 0.374** | 0.427** | 0.387** | 0.349** | 0.363** |
| | Sig (2- tailed) | 0.090 | 0.002 | 0.000 | 0.002 | 0.005 | 0.003 |
| | N | 64 | 64 | 64 | 64 | 64 | 64 |
| Time until sexual intercourse | Correlation coefficient | -0.126 | -0.272 | -0.155 | -0.219 | -0.330** | 0.062 |
| | Sig (2- tailed) | 0.395 | 0.061 | 0.293 | 0.135 | 0.022 | 0.676 |
| | N | 48 | 48 | 48 | 48 | 48 | 48 |
| *Correlation is significant at the 0.05 level (2-tailed) **Correlation is significant at the 0.01 level (2-tailed). | | | | | | | |

Interpretation of results

Female sexual issues are sometimes overlooked in women with POP, even though their sexual expectations after mesh surgery are an important part of the decision making.

Discussing sexual function should be an important part of the evaluation, before and after the surgery, as it can improve sexual function.

Concluding message

In our study, younger aged and higher educated women had higher FSFI scores, and could benefict the most from discussing these issues. With these results, we firmly believe it is possible to predict female sexual function after repairing pelvic organ prolapse. However, further studies are needed to identify the best predictors.

Disclosures

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