

SEXUAL FUNCTION AND HEALTH-RELATED QUALITY OF LIFE FOLLOWING ANTERIOR VAGINAL WALL SURGERY FOR SUI AND POP: A LONGITUDINAL STUDY

Hypothesis / aims of study

Currently, there are few studies that address sexual function and health-related quality of life (HRQOL) following anterior vaginal wall surgeries. The aims of study are to assess the effect of anterior vaginal wall surgery on female sexual function, HRQOL and the association between them over extended periods time.

Study design, materials and methods

The study population consisted of 109 patients (mean age, 57.3 years) who underwent anterior vaginal surgery for the treatment of SUI and/or POP between January 2000 and January 2007. The Modified Lemack Questionnaire and Pelvic Floor Distress Inventory were provided to patients three months prior to, 6-12 months and 12-84 months postoperatively following the surgery.

Results

Sixty-one (57.5%) of patients were sexually active before and after the operation. Of this sub-group, 12 (19.7%) reported an improvement in overall intercourse satisfaction, 21 (34.4%) described decreased satisfaction and 28 (46.0%) were unchanged, no further significant alteration was observed 12-48 months postoperatively. Vaginal dryness and asymptomatic vaginal narrowing increased significantly following the surgery, while the incidence of coital incontinence decreased significantly. There were no statistically significant differences in the frequency of intercourse, patients' perception of intercourse, frequency of orgasm and the importance of sex life. Partner discomfort remained unchanged. HRQOL improved significantly 6-12 month postoperatively with no further alteration 12-84 months postoperatively. There was no association between HRQOL and female sexual function in the post-operative period ($P = 0.4630$ and $P = 0.2705$).

Interpretation of results

Recent studies have evaluated the impact of vaginal surgery (SUI, POP) on female sexual function. However, it is difficult to draw definitive conclusions from the conflicting data presenting in these studies. In general, improvement in sexual function was secondary to resolution of coital incontinence and symptoms of SUI and POP. By comparison, deterioration in sexual contrast may be attributed to decreased libido, vaginal narrowing, scarring or damage to the highly innervated anterior vagina wall and clitoral region following vaginal surgery, and placement of artificial material near the urethra and base of bladder.

The sexual function questionnaire we used here is not validated since there is no validated female sexual function questionnaire in Chinese. Lemack questionnaire was a nonvalidated but popular and condition-specific sexual function questionnaire which has been previously used in retrospective and prospective studies. We modified it after interviewing some of our patients before mailing it to all of our participants. Sentilhes evaluated female sexual function with POP by both Lemack questionnaire and Pelvic Organ Prolapse Urinary Incontinence Sexual Questionnaires (PISQ-12) in a prospective study and showed that the result of the Lemack questionnaire was concordant with the validated PISQ-12 questionnaire, though Lemack questionnaire was initially used in patients with SUI. In order to investigate whether there was some alteration in sexual function after the operation with the time prolonged, we assessed sexual function of the participants 3 months before, 6-12 months and 12 months later after the operation in our questionnaire. However, we found our modified Lemack questionnaire could be correctly answered by the patients with high efficiency.

In the present study, 22 (36.1%) patients reported deterioration in sexual function post-operatively, 11(18.0%) described improvement and 28 (45.9%) experienced no change. A greater percentage of patients in the present study reported a deterioration than in the published literature (14-20%). Cultural factors may have contributed to this difference.

Pain due to vaginal dryness was observed in 15 patients. Eleven of these patients (73.33%) reported a deterioration in overall sexual function at 12 months post-op. As we known, none of them tried to resolve this problem by any measures. This information may aid in counseling patients that gel should be used for the presence of vaginal dryness, particularly pain due to vaginal dryness postoperatively. To the best of our knowledge, patients did not receive any counseling or therapy for the treatment of vaginal dryness. Our results suggest that such counseling and medical therapy (i.e., vaginal gels), should be routinely offered.

We suggest that resolution of coital incontinence may be the main contributing factor to improvement in patient-rated sexual function. Ten of 13 patients (76.9%) experiencing coital incontinence pre-operatively, reported a complete resolution or decrease in continence in the post-op period. These results are in agreement with the published literature.

The majority of patients (20/26 76.9%) who were sexually active preoperatively haven't regain sexual intercourse because they worried about the sexual activity would affect the surgical outcome. Their sexual partners may be also concerned that sexual intercourse could adversely impact post-op functional outcomes. Therefore, we think postoperative counseling is necessary to encourage patients to engage in sexual activity.

We furthermore demonstrate that there is no statistically significant correlation between sexual function and HRQOL. A larger study population may be necessary to demonstrate any such correlation. Overall, most patients were satisfied with the outcome of the procedure.

The design of our study was retrospective. This is an important study limitation as it introduces a likely recall bias. Prospective studies with a larger sample size are merited to further explore the impact of vaginal surgery on sexual function and HRQOL.

Concluding message

For most patients (40, 65.6%) sexual function did not deteriorate following anterior vaginal wall surgery. In patients reporting decreased sexual function, vaginal dryness was the major contributing factor. There was no statistically significant association between HRQOL and female sexual function. No further alteration in both sexual function and HRQOL was observed 12 month later after the operation.

Specify source of funding or grant

none

Is this a clinical trial?

No

What were the subjects in the study?

HUMAN

Was this study approved by an ethics committee?

Yes

<i>Specify Name of Ethics Committee</i>	The ethics committee of Sixth People's Hospital of Shanghai Jiaotong University
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes