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## SEXUAL IMPAIRMENT IN PATIENTS WITH PELVIC ORGAN PROLAPSE AND THE INFLUENCE ON SEXUALITY AFTER LAPAROSCOPIC SACROPEXY: A HOSPITAL BASED COHORT STUDY

Hypothesis / aims of study: Genital descensus is a common disease of the 50-70 year old woman. Most patients report about vaginal pressure, pain or other symptoms affected by prolapsed genital parts. Sexuality is often impaired, but in general patients will not define it as a leading symptom. Sexuality may be influenced directly by a mechanical disability or indirectly by the psychological side effects and fears. Increasing life expectancy is not only accompanied with a rising number of prolapses but also with the wish of a constant high level of quality of life including a satisfied sexual life. No data concerning sexual influence after laparoscopic prolapse surgery are available yet. The aim of this study was to evaluate the physical and psychological impairment of sexuality in women suffering from genital prolapse and the effect after laparoscopic repair.

Study design, materials and methods: 132 patients suffering from genital prolapse higher than grade one POPQ (pelvic organ prolaps quantification) underwent laparoscopic sacropexy. Accessory operations including lateral repair, anterior or posterior colporrhia, Lash or ant incontinence procedures were performed simultaneously if necessary. Patients were asked retrospectively to fill in two questionnaire concerning impairment of sexuality due to vaginal problems (ICIQ-VS) and sexuality in general (ICIQ-sex). Both questionnaires wer developed by the International Continence Society and are considered to discover changes before and after a certain therapy on a hig statistical level. The sexual scores of ICIQ-sex and ICIQ-VS were analysed pre- and postoperatively using SPSS (t-test and Wilcoxon test Statistic basic data such as response rate, mean follow up time, age and sexual activity were determined. Life quality questions were sub analysed. All data were also analysed with regard to age and accessory operations.

Results: We had a response rate of 84 %. The mean follow-up interval was 22. 2 month (range 13-34 month). Mean age at operation was 58 9 years (31-83 years). 57. 6 % of our patients were sexual active. The minority (4. 2 %) of the inactive patients reported of inactivity resultin from the prolapse. The remaining sexual inactive patients constituted their inactivity due to other reasons.

Postoperatively all patients of the active group remained active (57. 6 %). In the inactive group 50 % of patients, who were previously inactive due to vaginal reasons changed into the subgroup of inactivity due to other reasons. Patients who were preoperatively inactive due to other reasons did not change their sexual behaviour. In the sexual active group we found a statistical relevant improvement of the sexual matter score of ICIQ-VS from preoperatively 25.2 to 8.8 points after operation. ICIQ-sex score improved from 3.2 preoperatively to 1.4 points postoperatively (table 1). Pain and bladder symptoms were the predominant factors for disturbance of intercourse preoperatively. Postoperatively we found a statistical relevant decrease of vaginal dryness, pain, bladder problems and urinary leakage during intercourse (table 1, fig.1), but in comparison pain and vaginal dryness were the relatively predominant factors. 86.5 % of patients required accessory operations. Patients who underwent anti-incontinence procedures showed a maximum benefit after operation for all factors. Figure 1 shows the details of the sub-analysis with regard to additional operations. A statistical relevant improvement was found for both questionnaires in both age groups, but especially in patients younger than 50 years (figure 2). Regarding quality of life items we found preoperatively a higher level of impairment in the younger group.

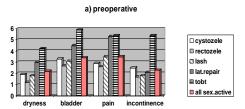
Interpretation of results: In contrast to vaginal or open approaches [1, 2] we found for the laparoscopic approach a significantly improvement of sexual scores concerning the biological and psychological aspect in the sexual active group. This correlates to our expectation, as we assumed, that the mechanical affection as well as fears and other psychological factors are highly influenced and enhance after endoscopic surgery. Urinary incontinence is an important factor for the quality of life. We found a maximum improvement of quality of life after surgery in patients suffering from urinary incontinence. The improvement of vaginal dryness results from vaginal estrogens, which were applied routinely in these patients in order to prevent tape erosion. The sexual activity rate of about 60 % in a medium age of 58.9 years is representative. With regard to the sub-analysis concerning age groups the differences may result from the higher sexual activity in the younger patients. Especially the quality of life items demonstrate the high influence of sexual aspects in younger women. The rate of completely sexual inactive patients due to the prolapse was rather low. Contrary to our expectations the operative approach did not increase the activity rate after operation at all. This is maybe reasoned by the small number of inactive patients due to prolapse. Probably some of these patients realised postoperatively, that their sexual inactivity resulted from additional non prolapse-associated reasons.

<u>Concluding message</u>: Laparoscopic prolapse surgery reduces sexual impairment in sexual active patients especially in the age group younger than 50 years. There is no benefit for patients who are completely sexual inactive due to the vault. Additional vaginal operations do not deteriorate the outcome concerning sexuality. To our knowledge this is the first study which analysis impairment of laparoscopic prolapse surgery to female's sexuality using standardised questionnaires. Our findings will maybe useful for the uro-gynecologist as well as the sexual therapist to answer patient's questions concerning sexuality after laparascopic prolapse treatment.

	Mean preoperative	Mean postoperative	Confidence interval	p-value	Mean difference
Vaginal dryness	2.2	1.4	0.09/1.5	P<0,05	0.8
Bladder problems	3.5	1.2	1.5/3.1	P<0,05	2.3
Pain	3.5	1.4	1.2/3.0	P<0,05	2.1
Urinary incontinence	2.3	0.8	0.8/2.2	P<0,05	1.5
Worries interfere sex	5.1	1.6	2.7/4.3	P<0,05	3.5
Partnership affected	4.1	1.5	1.8/3.4	P<0,05	2.6

ICIQ-VS (sex)	25.2	8.9	12.4/20.2	P<0,05	16.3
ICIQ-sex	3.2	1.4	1.1/2.4	P<0,05	1.8

Table1: Sexual active group (n= 64): statistical basic data (SPSS, t-Test, Wilcoxon values)



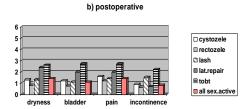


Fig. 1: Influence of accessory operations on sexual life: quality of life with regard to vaginal dryness, bladder symptoms, pain and urinary incontinence during intercourse: a) Pre- and b) postoperative mean values

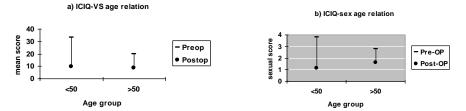


Fig.2: Influence of age in pre- and postoperative mean values: a) mean ICIQ-VS (sexual matters) score and b) mean ICIQ-sex score

## References

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Is this study registered in a public clinical trials registry?	No		
What were the subjects in the study?	HUMAN		
Was this study approved by an ethics committee?	No		
This study did not require eithics committee approval because	Retrospective Study, information of Eithics committee University of Cologne: no specialallowance necessary		
Was the Declaration of Helsinki followed?	Yes		
Was informed consent obtained from the patients?	Yes		