

THE RELATIONSHIP BETWEEN PELVIC ORGAN PROLAPSE, GENITAL BODY IMAGE AND SEXUAL HEALTH

Aims of study:

Because prolapse can present as a bulge outside of the body we wondered about its affect on women's genital body image. While body image in general has been well studied, providing evidence that body image dissatisfaction is increasing in women [1], scant data exists on the relationship between prolapse and body image specific to women's genitals. Sampling from both women with and without prolapse, the purpose of this study was to test the following hypotheses:

- H1. Women with pelvic organ prolapse will have significantly greater genital body image dissatisfaction than age matched control participants.
- H2. There will be a significant correlation between severity of prolapse and genital body image dissatisfaction.
- H3. In both women with and without prolapse there will be a significant correlation between genital body image and sexual function,
- H4. There will be a significant correlation between genital body image and overall body image

Study design, materials and methods:

Women who had participated in a previous study of pelvic floor disorders [2] who indicated they were willing to be recruited for future studies were the population used in this study. In the initial study (enrollment occurred between 2000 and 2004) POPQ examinations were performed and the participants were dichotomized into prolapse (POP-Q point at least 1 cm below the hymen) or controls (no POP-Q point lower than -1). The remainder of the data was collected via survey methodology. Women who indicated they were willing to be recruited for future studies (N = 123) were first sent an introductory letter, then unless they opted out they were sent questionnaires two weeks later by postal mail. The Genital Self Image Scale was administered, a 20 item (0-40 range) scale with higher scores indicating more positive genital body image. Additionally, overall body image was assessed using the Body Esteem Scale which includes three subscales, Weight, Appearance and Attributes. Sexual health was assessed using the Female Sexual Function Index which includes 6 subscales, Desire, Lubrication, Arousal, Orgasm, Satisfaction and Pain. Analysis included descriptive statistics, correlations between genital body image and overall body image, partial correlations between genital body image and sexual health (to control for overall body image) and independent T-tests to compare groups.

Results:

Survey response rate was 78% (Prolapse = 50, Controls = 46). Mean age (sd) for the women with prolapse was 60.3, and mean age for the control participants was 58.1, and 37 from each group indicated that they were sexually active.

Women with pelvic organ prolapse exhibited significantly lower genital body image scores (M = 29.15) than the age matched control women (M = 32.63, $p < .05$). However, H₄ was not supported in that there was not a significant correlation between severity of prolapse and genital body image ($r = .152$).

For both participants with prolapse as well as the age matched controls (who indicated that they were sexually active) there was a significant positive correlation between genital body image and overall sexual function as well as several of the sexual health subscales, (See Table 1),

TABLE

1

| GROUP | Prolapse Group (N = 37) | Control group (N = 37) |
|------------------------------|--------------------------|--------------------------|
| | GENITAL SELF IMAGE SCALE | GENITAL SELF IMAGE SCALE |
| Female Sexual Function Index | .430* | .463** |
| Sexual Desire | .332 | .379* |
| Lubrication | .243 | .376* |
| Sexual Arousal | .319 | .323 |
| Orgasm | .404* | .324 |
| Sexual Satisfaction | .556* | .409* |
| Pain with intercourse | .189 | .344* |

** p < .01 (2 tailed) * p < .05 (2 tailed)

In both women with pelvic organ prolapse and those without prolapse there were significant partial correlations between genital body image and overall body image (See Table 2).

TABLE 2

| PARTICIPANT GROUP | Participants with Prolapse (N = 37, mean age = 60.3 years) | Age matched controls (N = 37, mean age = 58.1 years) |
|---------------------------|--|--|
| | Genital Self Image Scale | Genital Self Image Scale |
| Body Esteem Scale - Total | .423* | .443* |
| Weight Subscale | .339 | .281 |
| Appearance Subscale | .553** | .504** |
| Attributes Subscale | .237 | .476* |

** p<.01 (2 tailed) * p<.05 (2 tailed)

Interpretation of results:

Our study was designed to overcome some of the limitations of previous studies by using an age matched control group and a measure of body image specific to the genital area. The results provide preliminary evidence that women with pelvic organ prolapse experience more genital body image dissatisfaction than women of the same age that do not have prolapse.

There are limitations associated with these findings. The majority of the women in this study were Caucasian, educated, and heterosexual, limiting the generalizability to other populations. In addition, clinic data was collected several years prior to this study, for this reason women who indicated they had undergone surgery for their prolapse were excluded from the analysis of the relationship between severity of prolapse and genital body image.

Concluding message:

Women with pelvic organ prolapse demonstrate significantly more genital body image dissatisfaction that does not seem to be dependent on the severity of the prolapse. This initial pilot work provides a foundation for future investigation between the relationships between prolapse and genital body image and how these relationships may influence decisions regarding treatment (i.e. watchful waiting vs. surgical correction).

References

1. Sanchez, D., & Kiefer, A. (2007). Body concerns in and out of the bedroom: Implications for sexual pleasure and problems. *Archives of Sexual Behavior*, 36, 808-820.
2. DeLancey, J., Morgan, D., Fenner, D., et. al. (2007) Comparison of levator ani muscle defects and function in women with and without pelvic organ prolapse. *Obstetrics & Gynecology* 109(2.1) 295-302.

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| <i>Specify source of funding or grant</i> | University of Michigan School of Nursing New Investigator Award SCOR: P50 HD044406 OPAL: RO1 HD38665 Janis Miller: Johnson and Johnson, Consultant Pfizer, Research Support |
| <i>Is this a clinical trial?</i> | No |
| <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> | University of Michigan Medical School Institutional Review Board (IRB MED) • Argus I Building, 517 W. William, Ann Arbor, MI 48103-4943 • phone (734) 763 4768 • fax (734) 763 9603 • irbmed@umich.edu |
| <i>Was the Declaration of Helsinki followed?</i> | Yes |
| <i>Was informed consent obtained from the patients?</i> | Yes |