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SEVERITY OF PELVIC ORGAN PROLAPSE IS ASSOCIATED WITH MEASUREMENTS OF GENITAL HIATUS

Aims of Study

Berglas and Rubin radiographically demonstrated enlarged levator hiatuses in women with severe pelvic organ prolapse [1]. Prior to the standard use of the Pelvic Organ Prolapse Quantification (POPQ) system, Delancey and Hurd investigated the relationship between degree of prolapse and genital hiatus area [2]. The present study aims to evaluate the relationship between the severity of pelvic organ prolapse and two clinical measurements of genital hiatus.

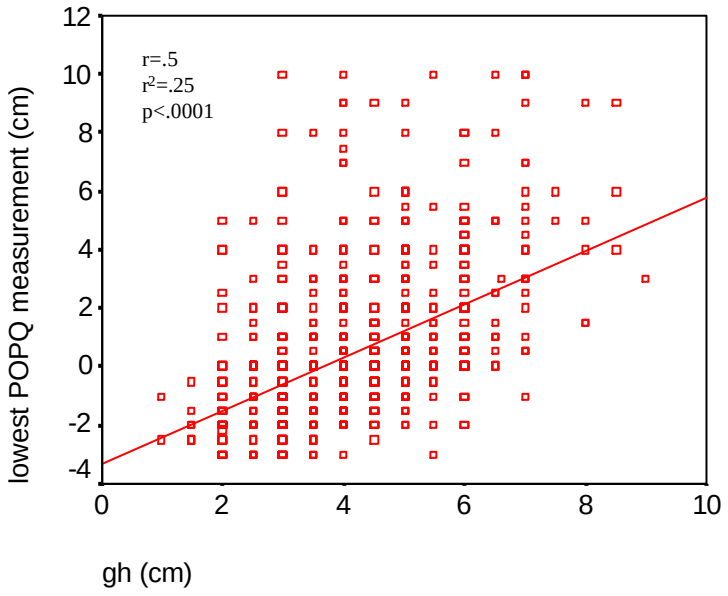
Methods

We studied all patients referred to an academic Urogynecologic practice for initial evaluation between January 1997 and December 2002. Physical exam findings were prospectively entered into a database at the time of evaluation. The severity of pelvic organ prolapse was defined using both ordinal staging and the lowest overall POPQ measurement. Methods, definitions, and descriptions conform to the standards recommended by the International Continence Society [3]. For all patients, the introital hiatus was defined as the POPQ measurement for genital hiatus (gh). For a subset of patients, separate measurements of the levator hiatus were obtained in the transverse and longitudinal dimensions by palpation of the muscle borders at maximal contraction. Pearson and Kendall's tau-b correlations were calculated.

Results

One thousand thirty seven patients had complete POPQ measurements. The mean patient age was 56.7±14.4 years, and the mean parity was 2.8 ±1.5. Seventy seven percent of patients had a Stage 2 prolapse or greater. Stage was positively correlated with gh (r=0.4, p<.0001). Lowest POPQ measurement correlated with gh as shown in the Figure 1.

Figure 1: Correlation between lowest POPQ measurement and gh measurement.



Three hundred eight seven patients had separate measurements of the levator hiatus. In this subset, measurements of levator hiatus were positively correlated with lowest POPQ measurement (transverse r=0.4, p<.0001; longitudinal r=0.5, p<.0001). Both measurements of levator hiatus were also positively correlated with gh (r=0.5, p <.0001).

Conclusions

This study demonstrates that increased severity of prolapse is associated with both an enlarged introital and levator muscle hiatus. The POPQ measurement gh is an easily obtained indicator of levator hiatus size.

References

1. Berglas B, Rubin IC (1953) Study of the supportive structures of the uterus by levator myography. Surg Gynecol Obstet 97: 677-92.
2. Delancey JO, Hurd W (1998) Size of the urogenital hiatus in the levator ani muscles in normal women and women with pelvic organ prolapse. Obstet Gynecol. 91: 364-8.
3. Bump RC, etal. (1996) The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. Am J Obstet Gynecol 175:10-17.