

WITHIN-DAY AND DAY-TO-DAY RELIABILITY OF ANAL PRESSURE MEASUREMENTS IN MEN

Aims of the Study

Anal pressure manometry may be used in the clinical assessment of male pelvic floor muscle strength, which is an important component of male urinary continence, faecal incontinence and erectile function. A test-retest design was used to assess within-day and day-to-day reliability of anal manometric measurements taken with the ECL F2 Elite System (Genesis Medical Ltd, London, UK) in a group of out-patients with self-reported erectile dysfunction.

Method

Measurements of maximal anal contraction (maximum anal pressure) and the lowest pressure recorded during a ten second hold of this contraction (anal hold pressure) were taken on the same day in 10 patients and on two days 3 months apart in another 16 patients. Results were analysed using paired t-tests. The Intraclass Correlation Coefficient (2,1) and Standard Error of Measurement (SEM) were also calculated.

Results

Same day measurements of maximum anal pressures ranged from 40-190cmH₂O (mean 127.2 ± 48.05cmH₂O) and anal hold pressures ranged from 36-178cmH₂O (mean 117.9 ± 45.28cmH₂O). There were no significant differences between repeated measurements of these pressures either within-day or following a three month interval (p > 0.30). Intraclass Correlation Coefficients for maximum and anal hold pressures, within-day and day-to-day, were greater than 0.9. The corresponding SEMs were less than 7cmH₂O.

Conclusion

Very reliable clinical measurements of anal pressure were obtainable in a group of men with erectile difficulties. Anal manometry may be a useful clinical measurement in the assessment of men with erectile and continence problems.