

Fluoro-urodynamic Image Interpretation Is Not Altered by Using Dilute Intravesical Contrast

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Abstract

Objective To determine if using one 250 mL bottle of intravesical contrast followed by sterile saline alters interpretation of fluoroscopic images during fluoro-urodynamics. **Materials and Methods** Subjects were randomized to receive 250 mL of intravesical contrast followed by sterile saline until maximal cystometric capacity vs non-dilute intravesical contrast alone during fluoro-urodynamics. Interpreters, blinded to study group, graded images on an ordinal rank scale rating confidence in image interpretation. Primary endpoint was differences in image interpretation between the two groups using visual grading characteristics curves and contrast-to-noise ratios (CNR). Secondary endpoints were obtaining anthropometric data such as body mass index and waist circumference to determine predictors of CNR in a multivariate multiple regression analysis. **Results** 26 subjects were randomized to receive dilute intravesical contrast and 22 non-dilute contrast; two subjects were unable to complete the study. There was no difference in baseline characteristics between the two groups. Visual grading characteristics demonstrated no difference in readability of the fluoroscopic images between groups and CNR was not statistically different between the two groups. No correlation was identified between CNR and waist circumference or body mass index. **Conclusion** Interpretation of fluoro-urodynamic images and image quality was not altered with using of 250 mL of contrast followed by saline. Expert reviewers did not perceive a difference in their confidence to distinguish between the two groups. Fluoro-urodynamics can be reliably performed using only 250 mL of contrast without compromising the ability to read the fluoroscopic images..