

DISSERTATION DEFENSE: CAMILLA MEDEIROS ARAUJO

DATE: APRIL 27, 2022

TIME: 9:30 am

PLACE: Google Meeting

TITLE: Pad test for urinary incontinence diagnosis in adults: Systematic review of diagnostic test accuracy

Key words: Urinary incontinence, Urinary incontinence, Disease severity index, date reliability, Test reproducibility, Measures of association, exposure, risk or outcome.

WORDS: 328

The pad test is a diagnostic tool for urinary incontinence (UI) severity classification and therapeutic response monitoring. However, the reliability and reproducibility of this test have been questioned. The objective was to investigate the quality of evidence from pad test accuracy studies on urinary incontinence diagnosis in adults compared to the urodynamic exam and summarize the accuracy and reproducibility properties. A systematic review of the diagnostic test accuracy was performed (PROSPERO: CRD42020219392). The eligibility criteria was studies that evaluated the diagnostic accuracy and reproducibility properties of four pad test protocols in adults of both sexes. Data sources was MEDLINE, Science Direct, Cochrane Database, Web of Science, LILACS, and Pedro databases. Two reviewers independently screened the eligibility of the articles. The risk of bias was evaluated with the QUADAS-2 tool. Eighteen studies, of which eight measured pad test accuracy, were included. A total of 1070 individuals were analyzed, the mean age ranged from 20 to 90 years. The risk of bias among the studies was high and, due to different cut-off points adopted by studies, the bivariate model was not satisfied to perform a meta-analysis. The accuracy of the long-duration protocols was generally moderate to high (sensitivity: 60%–93%; specificity: 60%–84%). The 1-hour protocols obtained higher accuracy values than the long-duration protocols. The overall reproducibility was moderate to high ($\kappa \geq 0.66$). The 1-hour pad test had better accuracy, but poorer reproducibility compared to the long-duration tests. Pad test results should be used with caution in clinical practice.

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