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CORRELATION OF DIGITAL PALPATION AND TRANSABDOMINAL ULTRASOUND FOR ASSESSMENT OF PELVIC FLOOR MUSCLE CONTRACTION

Hypothesis / aims of study

The purpose of this study was to determine the correlation of digital palpation and TA ultrasound to assess PFM contraction when recorded 1) simultaneous to digital palpation during one contraction and 2) following digital palpation testing in another contraction.

Study design, materials and methods

A descriptive correlational design was used to describe the relationship between variables. A total of 19 women (both asymptomatic women and those with incontinence or lumbo-pelvic pain) participated in the study. The modified Oxford scale was used to grade PFM contraction in digital palpation testing. The amount of bladder base movement on ultrasound was measured and considered as an indicator of PFM activity. Two trials were performed for TA ultrasound measurement: 1) simultaneous to digital palpation during one contraction, and 2) following digital palpation testing in another contraction. Spearman's correlation coefficient was used for analysis.

Results

There was a significant correlation between digital palpation and TA ultrasound for PFM assessment when measured simultaneously in one contraction ($\rho=0.62$, $p=0.01$) and separately in a different contraction ($\rho=0.52$, $p=0.02$), with a stronger correlation found in simultaneous testing.

Interpretation of results

Digital palpation and TA ultrasound measurement are significantly correlated and measure comparable parameters in evaluation of PFM contraction.

Concluding message

Specify source of funding or grant	ACECR
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	ethical committee of University of Social Welfare and Rehabilitation Sciences
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes