

VALUE OF UROGENITAL HUMIDITY IN MEN IDENTIFIED BY THE 24-H PAD TEST.

Hypothesis / aims of study

The 24-h pad test yields objective measurement of the urine loss and its use is recommended by the ICS [1]. The cutoff point of 1.3g was adopted by the ICS as the normative value for the 24-h pad test [2]. However, this cutoff point was based in one study from Australia investigating 120 women and only 14 men. Recent study has demonstrated that 4g instead of 1.3g should be the cutoff point for women who live in warmer weather [3]. Furthermore, 1.3g is lower than the 24-h pad test value that we observe in continent men in our clinical practice. A 24-h pad test cutoff point lower than the real value can lead to the misleading interpretation that patients are not dry when they actually are. Therefore, this study hypothesized that the cutoff value of 1.3 for the 24-h pad test may not be valid for men who live in countries with high temperatures.

Study design, materials and methods

This prospective study documented the 24-h pad test values of continent men residents in a city with mean temperature of 20°C, collected from Dryman^R (incontinence pads for men). We collected 24-h pad tests of 85 participants older than 18 years. Continence was defined as none episode of urine leakage [1] investigated by self-report. They used man pads during 24 hours and answered a questionnaire for adhesion documentation. These pads were weighted in a precision balance scale of 0,01g. The urogenital humidity was calculated as the difference between the pad's weight before and after use. Descriptive statistical analysis, using median and interquartile intervals, were performed at the SPSS 17.0 for Windows.

Results

The initial sample consisted of 120 participants. However, 28 did not return the pads and 7 were invalidated because did not follow the instructions. Therefore, data from 85 participants were analyzed. Their mean age was 34,09 years (ranging from 18 to 62 years old). The median of urogenital humidity was 5.26 g (range = 0.30g - 12.19g, 95th percentile = 9,95g). The mean temperature during data collection was 19,28°C (95% IC = 18,76 – 19,81; range = 15,20°C to 25,39°C). The mean relative air humidity was 66,22%, ranging from 42,71% to 88,58%.

Interpretation of results

The results from the present study demonstrated values of urogenital humidity much higher than the cutoff point established by the ICS (95th percentile = 9.95g vs. 95th percentile = 1.3g) Differences might be related with higher air temperature and humidity, and higher surface of contact of the pad used in the present study.

Concluding message

The value of the 24-h pad test established by the ICS is not valid for the investigated sample.

References

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Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Comitê de Ética e Pesquisa da Universidade Federal de Minas Gerais (CAAE - 0495.0.203.000-11) **Helsinki:** Yes **Informed Consent:** Yes