

EVALUATING PAD WEIGHT GAIN IN ASYMPTOMATIC WOMEN

Hypothesis / aims of study

Pad weight gain (PWG) is widely used as a measure of the volume of urine leakage in women. The ICS assessment of incontinence committee suggests that a pad weight gain >1g/hr or 4g/24 hrs is a positive test for urinary incontinence [1]. However, we hypothesise that the threshold for bothersome as well as normal levels of leakage are far lower than this threshold. The aims of this study, therefore, were to measure PWG in a range of women who do not complain of urinary incontinence over a time period consistent with ambulatory urodynamic testing.

Study design, materials and methods

A pilot observational study was performed measuring the increase in weight of small sanitary pads worn by 21 healthy, female volunteers of mean age 41.9 (± 10.8) years.

Pads were placed in an airtight medical grade plastic sample bags, and combined bag and dry pad weight measured using scales accurate to 0.001g.

Pads were worn for a minimum of 5 hours and returned anonymously in their original bag for reweighing. Anonymous data was collected on age; weight; height; parity; complications during delivery (e.g. forceps, episiotomy); years since last delivery; menopausal status; hours pad worn and any history of urine leakage for each participant

Results

The mean pad weight gain (\pm SD) was 0.166 (± 0.158) g. The maximum recorded pad weight gain was 0.621g and the minimum was 0.024g. The mean time of pad wear (\pm SD) was 5.71 (± 0.94) hours.

No correlation was observed between pad weight gain and BMI, parity, age, hours worn or years since last birth.

Interpretation of results

The results of the pilot study indicate that pad weight gain in women who do not complain of urinary incontinence is typically in the range 0-0.48g (95% confidence interval, based on two standard deviations from the mean). This suggests that symptomatic women 'leaking' more than 0.5ml in 5 hours may be considered to have urinary incontinence. A further 79 volunteers will be sought to validate the results of this pilot.

Concluding message

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Disclosures

Funding: Nil **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** University College London Hospitals **Helsinki:** Yes **Informed Consent:** Yes