

SCREENING FOR UTI BEFORE URODYNAMICS – ARE WE DOING THE RIGHT TEST?

Hypothesis / aims of study

To evaluate the current practice of screening for urinary tract infection and estimate urine infection rates among women attending the hospital for urodynamic study.

Study design, materials and methods

A retrospective audit was carried out on a series of women with urinary incontinence that was screened for urinary tract infection prior to urodynamics over a period of 5 years. As per the local protocol, all women had a routine urine dipstick test with reagent strips performed at the time of cystometry and the investigation was postponed for those who tested positive for leucocytes and nitrites in urine. A mid stream sample of urine from these women collected by the conventional method was sent to the microbiology lab for culture and those confirmed to have urinary infection were treated accordingly. All women were offered a subsequent appointment for urodynamics.

Results

830 women had a urine dipstick test performed at the time of cystometry and 42 of these tested positive for leucocytes and nitrites. Urodynamic study was postponed in all these cases and a mid stream sample of urine sent for culture.

Out of these, 26 urine samples showed significant bacteriuria with colony count of more than 100,000/cu.mm and a predominant organism. In 10, report suggested contaminants and in 6 there was no growth.

Interpretation of results

About 5% tested positive for nitrites and 3% had a Urinary tract infection confirmed on urine culture in our series of women attending for urodynamics. Only 62% of those positive for nitrites in urine on testing with reagent strips tested positive on urine culture.

The rate of contaminants was 38% in this group.

Concluding message

Of those that tested positive for nitrites on reagent strips and had urodynamics postponed, urine culture confirmed infection in less than two thirds. A routine urine culture within a week before urodynamics may be an alternative screening test, but cost effectiveness needs to be looked into. Methods to reduce contamination rates in this group such as use of novel urine collection devices needs to be evaluated.

References

Am J Obstet Gynecol. 190(5):1234-40, 2004 May.

Int Urogynecol J Pelvic Floor Dysfunct. 15(6):391-3; discussion 393, 2004 Nov-Dec

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	Ethics committee approval was not needed as this was a retrospective audit evaluating the current clinical practice
<i>Was the Declaration of Helsinki followed?</i>	No
<i>This study did not follow the Declaration of Helsinki in the sense that</i>	This work is an audit and not a research study
<i>Was informed consent obtained from the patients?</i>	No