Hypothesis / aims of study

The clinical usefulness of ambulatory urodynamic evaluation in the detection and subsequent treatment of bladder dysfunction remains debatable. It is invasive, time consuming and expensive. The aim of this study was to review the results from our ambulatory tests and relate the outcome back to the original standard urodynamic test to see if there were any features to predict overall outcome.

Study design, materials and methods

60 patients from our institution underwent ambulatory urodynamic testing between May 2009 and October 2011. Case notes were reviewed documenting outcome from the standard urodynamics, ambulatory urodynamics, any clinical intervention and results from such intervention. All ambulatory studies were performed by the same clinician. A further 40 tests were performed in this time period on patients referred from other centres within the region but their outcome results are not available to us. Indications for ambulatory studies were mostly that the results from standard tests did not fit with the clinical picture.

Results

Of the 60 patients, 49 were female and 11 male with a mean age of 56 years. 13/60 patients had had an intervention post standard urodynamics but proceeded to ambulatory studies as there was no improvement in their symptoms with the management received. No patients demonstrated loss of compliance on ambulatory testing despite it being reported in 4 of the standard tests. A diagnosis was possible in 51/60 (85%). Detrusor overactivity was the commonest finding in 43/60 (72%). Treatment based on the ambulatory studies had a satisfactory outcome in 92%. All studies were able to be interpreted adequately despite technical difficulties with the rectal line in 9/60 (15%).

Interpretation of results

Despite a normal standard urodynamic result, the most common finding on the ambulatory studies was detrusor overactivity which subsequently responded to appropriate therapy. No features in the standard urodynamics predicted outcome from ambulatory studies though the patient’s history did fit with the ambulatory results.

Concluding message

Despite being a time consuming, technically challenging test, ambulatory urodynamics are important in our armamentarium of investigations in patients with seemingly refractory symptoms and normal standard studies.

Disclosures

Funding: Nil required Clinical Trial: No Subjects: HUMAN Ethics not Req’d: retrospective review of results Helsinki: Yes Informed Consent: No