

VIDEOCYSTOURETHROGRAPHY: A JUSTIFIABLE INVESTIGATION FOR VOIDING DISORDERS WITH CURRENT IONISING REGULATIONS?

Introduction

Videocystourethrography is an investigation that is recognised as of benefit when additional anatomical information is likely to aid management. Video investigations are more costly than conventional cystometry and involve the exposure of an individual to ionising radiation in a similar dose to an IVU. The introduction of new ionising regulations (IR(MER)) in the UK has also meant that each video investigation must be justified with clear indications. Voiding difficulty, particularly in young men is one of the main indications for videocystourethrography in our unit. However, by the very nature of their problem, these individuals may not be able to void in public making imaging of voiding impossible. We have noted that other centres have reported a high voiding failure rate in the past, although we were unable to find any references to this. This prospective study was therefore undertaken to determine the percentage of individuals undergoing videocystourethrography in our unit who felt that their voiding was typical under investigation conditions and therefore whether the cost and potential morbidity of these investigations can be justified.

Methods

The investigations of all adults attending for videocystourethrography during the period 3rd March 2000 to 25th February 2002 were recorded in the usual way with additional information concerning their judgement as to whether the void was typical for them. Indications for videourodynamics in our department include women who have had surgery for stress incontinence, young men with voiding difficulties, men with post prostatectomy incontinence and patients with neurological conditions. Patients who were normally unable to void i.e. patients with a non-functioning detrusor, were excluded from the study. Information obtained included, whether voiding took place, and whether the individuals regarded their voiding as 'typical' for them.

Results

This study is ongoing and the results are accurate at the time of writing. 167 patients (88 women and 79 men, age 17-81yrs) fulfilled the inclusion criteria. 146, (87%) considered they voided in a normal fashion. 17, nine women and eight men, (10%) voided atypically and 4, three women and one man, (2%) were unable to void. Therefore a total of 21 (13%) patients did not void, or did not void normally during the investigation. Patients who voided atypically, considered their voiding worse than usual. 17 of these, gave the test situation as the reason for the difficulty, although only three of these had an inconclusive diagnosis. Three of the remaining four found it difficult to initiate voiding with a catheter in and one was unable to void for no obvious reason.

We are currently discussing with our Radiation Protection Advisor, ways of screening more remotely from patients, to give them more privacy.

Discussion

The low percentage of voiding failures justifies our performing videocystourethrography in patients referred with voiding difficulties. When video investigations were first introduced into our department, a busy tertiary referral unit, they were performed in the radiology department. There were a high number of voiding failures at that time which resulted in the introduction of a mobile imager into our department with a C arm enabling fewer staff in attendance, as well as permitting women to void in a more natural, sitting, position. This change in practice may account for the discrepancy between the voiding failures we record and those described elsewhere. We also feel our policy of giving proper patient information concerning the test, carrying out the test in an unrushed, calm, atmosphere (60-90mins per patient) and using a frequency/volume chart to prevent overfilling, all adds to our overall success rate. This study has confirmed our clinical impression that voiding failures during video studies are now relatively low. In line with the recent legislation we have introduced stricter criteria for video urodynamic studies and as a result do less than before the implementation of IR(MER).