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Author(s):	Kageyama S, Watanabe T, Hayami S, Kurita Y, Ushiyama T, Suzuki K, Fujita K
	Double Spacing
Institution	Department of Urology, Hamamatsu University School of Medicine
City	3600 Hanada-cho, Hamamatsu, Japan
Country	Double Spacing
Title (type in CAPITAL LETTERS)	CAN PREDICT OF PERSISTING DETRUSOR HYPERREFLEXIA AFTER TRANSURETHRAL PROSTATECTOMY FOR BENIGN PROSTATIC HYPERTROPHY?

AIMS OF STUDY

Detrusor hyperreflexia (DH) is frequently found in patients with benign prostatic hypertrophy (BPH), and persists in 30-50% of patients after successful removal of the bladder neck obstruction by transurethral prostatectomy (TUR-P) or surgical enucleation of the prostate (1-2). It is beneficial for surgeons to be able to identify patients who are at risk of suffering post-operative persisting urinary irritative symptoms and DH.

PATIENTS AND METHODS

Twenty-three patients who showed DH pre-operatively were included in this study. Of these 24 patients, 4 had neurogenic bladder because of a previous cerebrovascular disease. The other 20 patients were considered as having DH because of BPH unstable bladder. These 20 patients were classified according to cystometry patterns. Pattern 1 was the continual sporadic onset and offset of DH. Pattern 2 was a single episode of DH that occurred with bladder volume of less than 160 ml. Pattern 3 was a single DH episode that occurred when the bladder distended over 160 ml. Preoperative single photon emission CT (SPECT) was performed on 14 patients (3). Cystometric findings at 3 to 6 months after surgery were compared with the preoperative findings.

RESULTS

Four of 6 Pattern 2 patients (67%) and all Pattern 3 patients (100%) became free from DH after surgery. In contrast, all 5 Pattern 1 patients and 4 patients with neurogenic bladder showed persisting DH. Compared with Pattern 3 patients, Pattern 1 patients frequently complained of urinary urgency before surgery, and their symptoms and uroflowmetry parameters did not improve after surgery. Among 14 patients who received pre-operative SPECT, all 8 patients with areas of low cerebral blood perfusion at the frontal lesion showed persisting DH. Conversely, all 6 patients whose SPECT results were in the normal range showed no DH after surgery.

CONCLUSION

When DH repeatedly occurs (Pattern 1), or occurs at a bladder volume of less than 160 ml (Pattern 2), there is a greater risk of post-operative persisting irritative symptoms. Abnormal SPECT findings can also predict the post-operative persisting DH. Combining these two pre-operative examinations we can better predict the existence of post-operative DH in patients with BPH.

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