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Author(s):	P.F. Austin, A.J. Casale, R.C. Rink
	Double Spacing
Institution	Riley Children's Hospital, Indiana University,
City	Indianapolis, IN, USA
Country	Double Spacing
Title (type in CAPITAL LETTERS)	IMPROVED BLADDER EMPTYING IN POSTERIOR URETHRAL VALVE PATIENTS AFTER SELECTIVE ALPHA BLOCKER THERAPY

Aims of Study: Interest in bladder malfunction in children with posterior urethral valves (PUV) has focused mostly upon early life when the bladder is most affected by high pressures due to outlet obstruction. As boys with valves grow older, problems with bladder function may persist and continue to cause hydronephrosis, urinary tract infections, and incontinence. These boys often fail to store and empty urine at acceptable pressures and they often cannot empty completely. The aim of this study was to investigate potential benefits of selective alpha blocker therapy to improve bladder emptying in PUV patients.

Methods: Five patients with a history of PUV ranging from 3-9 years old (mean 5.6 y.o.) were identified to have poor bladder emptying. Poor bladder emptying was documented by post void residual (PVR) measurements, symptomatology, as well as by demonstration of new hydronephrosis on ultrasound. All patients were initially placed on 0.5mg of doxazosin nightly and followed monthly with PVR measurements and ultrasonography.

Results: New or increased hydronephrosis was seen in 3 patients (2 bilateral, 1 solitary kidney) while chronic hydronephrosis was present in the remaining 2 patients (1 solitary kidney). After alpha blocker therapy, hydronephrosis resolved in 2 patients, improved in 2 patients, and remained unchanged in 1 patient. Bladder emptying was also noted to markedly improved in 4 patients after alpha blocker therapy with a 72% mean reduction in PVR (range 35-96%). Only one patient with a previous ureteral bladder augmentation demonstrated a persistent large PVR (6.5% reduction) despite improved flow on uroflowmetry (10-fold increase).

Conclusions: In our early experience, patients with valve bladders appear to benefit from selective alpha blocker therapy. Not only is bladder emptying improved, but hydronephrosis due to elevated bladder pressures has also substantially improved in most patients. Future investigation is necessary to determine if selective alpha blocker therapy may provide long term benefit in patients with PUV.