

## ARE POSTERIOR URETHRAL VALVES (PUVS) MORE COMMON IN BOYS WITH HYPOSPADIAS?

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**Aim:** To evaluate the association between hypospadias and PUVs in boys with urinary symptoms post hypospadias repair.

**Method:** All patients were identified from surgical databases of prospectively collated information covering all specialist children's hospitals in the country. The medical notes were reviewed to ascertain demographics, the type of hypospadias, the mode of presentation of the valves and outcome.

**Results:** Between January 2003 and December 2014 there were 2,309 hypospadias repairs performed in Scotland. 15 of these patients were subsequently diagnosed with PUVs. The median age at hypospadias surgery was 1.4 years (1 to 4 years). 6 patients had proximal/penoscrotal, 2 midshaft and 7 distal hypospadias. The median time to diagnosis of the PUVs was 2 years (0.2-10 years). 4 boys had associated anomalies. 13 boys presented with voiding symptoms +/- UTI and 2 with UTI only. All boys had valves diagnosed at cystoscopy with resection during the same procedure. All boys had normal renal function. Ultrasound was performed pre cystoscopy in 7 boys, only one was abnormal with mild bladder thickening. Post operatively there were 2 abnormal ultrasounds. Follow up was available for 13 patients (median 2 years) 11 had no urinary symptoms and 2 had ongoing but improved daytime incontinence. The incidence of this dual diagnosis in Scotland is 6 per 1000 cases of surgically repaired hypospadias.

**Conclusion:** The incidence of PUVs in boys with hypospadias in Scotland is greater than 1 in 200. All of the boys in this series had normal renal function suggesting a milder spectrum of disease. All had their condition diagnosed incidentally at cystoscopy.

The incidence is not high enough to recommend routine cystoscopy in all case of hypospadias, but the diagnosis should be considered in boys presenting with urinary symptoms post repair. Awareness of this rare association is essential to make an early diagnosis.

