Posterior urethral valves

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PUVs are membranous folds that obstruct the lumen of the posterior urethra, a ff ecting about 1 in 4000 live-born boys. Girls are not a ff ected. About one-third are identified antenatally with bilateral hydronephrosis, a dilated bladder and a dilated posterior urethra, which, on imaging, looks like a keyhole. In severe cases, there is oligohydramnios and lung hypoplasia. Postnatal presentations include urinary tract infections, bladder distension and voiding dysfunction. The diagnosis is confirmed on a voiding cystourethrogram, which shows a dilated posterior urethra with a thick-walled bladder (Figure 20.8). Ultrasonography looks for hydronephrosis and a thickened bladder. Renal function can be assessed with - eter - routine blood tests and glomerular filtration rate or a DMSA scan. The valves are ablated or resected; close follow-up is needed since bladder dysfunction is common and 30% develop renal failure. Summary box 20.2 Urinary tract obstruction /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF

Figure 20.7 Voiding cystourethrogram demonstrating right-sided vesicoureteral re /f_l ux. The bladder is full of contrast (arrow).

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B A C Figure 20.8 Lateral view showing a dilated posterior urethra (A) and trabeculated bladder (B) due to posterior urethral valves (C), seen on a voiding cystourethrogram. Prenatal fetal hydronephrosis often resolves under observation alone Severe ureteropelvic junction obstruction warrants a pyeloplasty Ureterovesical junction obstruction is one cause of megaureter Vesicoureteral re /f_l ux: severity is determined by voiding cystourethrography Posterior urethral valves lead to renal failure in 30% of affected boys

One in a hundred people have an upper renal moiety draining into a duplicated ureter. Both ipsilateral ureters may fuse such that only one ureter enters the bladder, or the duplicated ureter may have an ectopic opening into the bladder, urethra, vagina, vulval vestibule, seminal vesicle or

rectum and is a rare cause of wetting. A vesical ectopic ureter may be associated with a dilated and obstructed intravesical length of ureter. Such a structure is known as a ureterocele and may be detected ante natally . The ectopic upper pole ureter typically has an orifice lying inferomedial to the lower pole ureter; an arrangement known as the W eigert–Meyer rule. The upper renal moiety has a ureter that may be obstructed at the bladder, whereas the lower renal moiety has a ureter with a predisposition to reflux. Posterior urethral valves

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