

FIG 26-2 Major sites of urinary tract obstruction.

Causes of obstructive uropathy include congenital problems, such as posterior urethral valves (PUVs), ureteropelvic junction (UPJ) and ureterovesical junction (UVJ) obstruction, and ureterocele. Acquired causes include renal or bladder stones, tumor, and trauma. PUVs are obstructing membranous folds within the lumen of the posterior urethra and are the most common cause of obstruction of the urinary tract in newborn males, as well as the most common cause of chronic renal injury from obstructive uropathy (Khan, Fahim, Mansoor, 2012). Because the obstruction occurs in the urethra, the bladder and upper urinary tract are affected. Damage to distal nephrons in chronic uropathy may cause decreased glomerular filtration, which can lead to renal insufficiency. Damage to smooth muscle of the bladder and upper urinary tract also may occur with obstruction and can contribute to bladder dysfunction. Because stasis of urine serves as a medium for bacterial growth, infection can magnify destructive changes of obstruction and cause increased renal damage as well as increased morbidity.