

HD-11: ABNORMAL GENITAL DEVELOPMENT

Learning Objectives

Development of the upper and lower urinary tract largely takes place over the first 15 weeks of embryogenic life. The interaction of the ureteral bud and metanephric blastema are the key components in the normal development of the kidney and we will look at abnormalities affecting renal development including:

Renal agnesis.

Renal cystic disease.

Horseshoe kidney.

Problems of ureteral bud placement including vesicoureteral reflux, ureteral duplication

Ureteral ectopia and ureterocele

Bladder development occurs during the first eight weeks of embryogenic life and defects in bladder development and bladder formation include:

Exstrophy-epispadias complex.

Posterior urethral valves.

Prune belly syndrome.

Patent urachus.

Genitalia development takes place somewhat later and is probably complete by 15 weeks of gestation and defects in genitalia development include vaginal agenesis and partial vaginal agenesis in the female and hypospadias in the male.

The objectives of this lecture will be to understand the cause and effect of various defects in both renal, bladder and genitalia development and the clinical outcomes of these defects.