## Exstrophy-Epispadias Complex

**Bladder exstrophy** is a severe defect involving the musculoskeletal system and the urinary, reproductive, and intestinal tracts. It is one of three anomalies that define the exstrophy-epispadias complex (EEC). **Epispadias** is an exposed or open dorsal urethra. Bladder exstrophy is a more severe defect characterized by an open, inside out bladder with the inner surface exposed and the dorsal urethra on the lower abdominal wall (Figs. 26-4 and 26-5). The third disorder, **cloacal exstrophy**, is the most severe, and includes bladder exstrophy as well as exstrophy of the large intestine (hindgut) through an abdominal wall defect. In addition, there is anal atresia, omphalocele, hypoplasia of the colon, anomalous genitalia, and often spinal dysraphism. Fortunately, incidence of cloacal exstrophy is low—less than 1 per 100,000 live births (Feldkamp, Botto, Amar, et al, 2011). Classic bladder exstrophy typically includes findings of diastasis (separation) of the symphysis pubis (pelvic bone), low set umbilicus, anteriorly displaced anus, defects of the genitalia, and inguinal hernia. The incidence of bladder exstrophy ranges from 3.3 to 5 per 100,000 live births and is more common in males than females (Jayachandran, Bythell, Platt, et al, 2011).

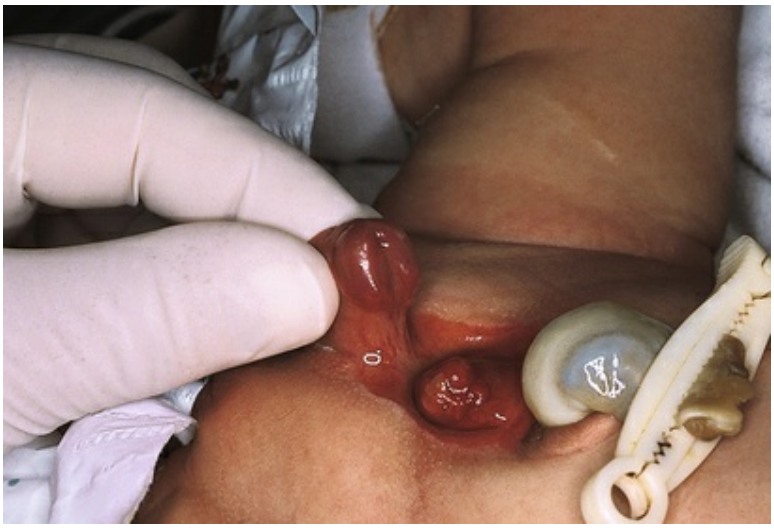

**FIG 26-4** Newborn with bladder exstrophy and epispadias. (Courtesy of Tim Yankee, St. Francis Hospital, Tulsa, OK.)