

## LETTER TO EDITOR (VIEWERS CHOICE)

### PATENT URACHUS IN A NEONATE

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A 3 days old male child weighing 3 kg delivered as full term per vaginam in a peripheral hospital was referred with complaints of voiding of urine from umbilicus soon after birth. Mother had unremarkable medical and obstetrical history except for ultrasound done at 20th week of gestation showing umbilical cyst communicating with foetal urinary bladder. Thereafter no ultrasound was done for its follow up or evaluation as per antenatal records. Local examination revealed a 2 x 2 cm cystic swelling at the inferior margin of umbilicus (with cord partially detached) which was observed to drain urine. Voiding also was documented from the penile urethra. Ultrasound abdomen showed a tract communicating between the umbilicus and urinary bladder superiorly. On the 5th day of life, urachus was surgically excised.

Congenital patent urachus is a rare anomaly with an estimated incidence of 0.25:10000 deliveries. (1) Males are affected twice as commonly as female. Embryologically, the urachus is a derivative of the allantois. The allantois appears on day 16 post-conception as an out pouching of the caudal wall of the yolk sac. It functions as an embryonic bladder, in early blood formation and in formation of the definitive bladder. Normally, the extra embryonic part of the allantois degenerates during the second month of the gestation. Occasionally, trace remnants of the allantois remain in the proximal umbilicus and may be seen between the umbilical arteries on pathologic examination of foetuses at this gestational age. The intraembryonic portion forms a connection from the umbilicus to the apex of the bladder. As the bladder enlarges, the allantois involutes to form the urachus. The urachus has little function after the second month of gestation. After birth it becomes fibrous cord which remains in the adult as a median umbilical ligament. Failure of the urachal lumen to close can result in a variety of anomalies including complete luminal patency (patent urachus), distal urachal patency (urachal sinus), proximal patency (urachal diverticulum), and urachal cysts (2).

Usually it is not associated with other congenital defects, however Rich et al has reported associated anomalies in 46% of children presenting with urachal anomalies including omphalocele, omphalomesenteric remnant, meningomyelocele, unilateral kidney, hydronephrosis and vaginal atresia. (3) Our patient had no other anomalies.

Management of the patient with completely patent urachus involves surgical excision of the urachus with excellent results when no other associated anomalies are present

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