Urachal Malformation

The urachus is a remnant of the connection between the bladder and the umbilicus (belly button). This connection should seal off around the 12th week of gestation.

Common types of urachal malformations include:

1. A patent urachus occurs when the connection between the bladder and belly button fails to close. This can cause urine to backflow into the belly button.
2. A urachal cyst occurs when a section of the pathway fails to close but there isn’t a complete connection. Fluid can get trapped in the open section of the channel and lead to an infection. These children can present with abdominal pain or drainage from the belly button.
3. A urachal diverticulum is when the urachus does not close near the bladder and leaves a blind ending pouch that can lead to infection.

A kidney and bladder ultrasound and/or voiding cystourethrogram (VCUG) are the common diagnostic tools to diagnose urachal malformations. Treatment is based on the type of urachal malformation a child has but typically requires surgery to remove the urachal remnant.