Clinical Image description

A 36-week preterm neonate with anal atresia and recto-perineal fistula was catheterized with a size 6F Foley’s catheter when she underwent anoplasty on the second day after birth. When the patient recovered from anesthesia, it was decided to remove the catheter. While the catheter was being removed, resistance was felt halfway through the procedure. Abdominal plain films revealed a catheter coiled in the pelvis. With copious lubricant injected into the bladder through the catheter and patient sedated, it was removed by manipulation alone using gentle traction (Figure 1). The infant had no bleeding at the urethral meatus and no obvious abnormality in urination during the 3-month of follow-up.

Catheter knotting is an extremely rare complication of catheterization. The widely accepted hypothesis is that the catheter forms a loop and coils on itself when excessive length of the highly flexible catheter is inserted into the bladder. As the bladder decompresses the catheter tip loops through the coil. It mainly occurs in young boys who have been catheterized with a feeding tube. To our knowledge, this is the first case of Foley’s catheter knotting in a newborn in the literature [1]. The catheter’s relatively wide and tough head increases the difficulty and risk of pulling out the catheter directly. However, it was unexpectedly removed by manipulation alone.

Various methods have been described to remove a knotted catheter such as manipulation alone using gentle traction, manipulation with detangling using a guidewire, manipulation with dilatation, endourology and laparoscopy techniques [1]. From our own experience, we recommend more attempt at manipulation alone using gentle traction when the urethral is sufficiently lubricated and patient adequately sedated or anesthetized, especially if the patient is a female, because the female urethra is wider, shorter and more malleable compared with the male.

**Figure 1:** (A) Abdominal plain films revealed a catheter coiled in the pelvis. (B) Knotted catheter.

**References**