An unsuspected knot: A rare case of intravesical looping of infant feeding tube

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CASE REPORT

A 10-year-old boy came to us in surgical casualty, referred from a primary health center following a unsuccessful attempt to remove a blocked infant feeding tube (IFT) placed as a per urethral catheter (PUC). The patient underwent an abdominal surgery one week back, nature of which was not known during which he was catheterized peroperatively. The patient experienced repeated bouts of urinary retention in the postoperative period. Assuming it to be due to catheter blockage, the catheter was flushed repeatedly, which was followed with clear flow of urine through the IFT, resolving the acute crisis. However, after one week, when the patient reported of complains suggestive of catheter block, the catheter could neither be flushed, nor removed due to undue resistance and was referred to us as a case of acute urinary obstruction.

In our casualty department, the patient was visibly in pain with bladder palpable up-till the umbilicus, with a blocked, non-retrievable, PUC; a temporary USG guided bladder drainage was performed. Following this liberal amount of Xylocaine jelly (around 10 ml) was instilled through the external urinary meatus, with an idea of dilating the urethra. As soon as the jelly was inserted the catheter was expelled through the urethra with force, with an unsuspected knot sitting at its top (Figure 1). There was some bleeding through the meatus following this which settled on its own (Figure 2). Subsequently, the patient was able to pass the urine normally.

DISCUSSION

The idea of using infant feeding tubes as temporary urinary catheters in pediatric age group is not new. The stiff nature of these tubes helps in easy catheterization in comparison to smaller size Foley catheters which due to excessive pliability are difficult to manage. Further the Foley catheters often require guide-wire placement initially which have a similar characteristics like that of
an infant feeding tube in terms of stiffness. However, this same property can also lead to awkward intravesical bending or looping of the both these devices. Knotting of guidewire has been previously reported in literature during placement of a central venous catheter [1] and during the PCNL technique [2]. A report of three cases following intravesical knotting of an IFT has also been reported in literature, though a clinical image is categorically missing [3].

We have deduced that the most common reason for this knotting is the characteristic stiffness of infant feeding tubes that make them more prone to coiling during excessive insertion of the tube per urethrally [4]. We feel that a better understanding of the anatomy of male urethra in term of its length especially in pediatric population can be the key to preventing this problem. Further as seen the case report, evidence of repeated catheter blockage may be the only indicator of this sinister problem.

CONCLUSION

It is extremely important to understand the anatomy of a male urethra especially in children. Care should be taken not to insert the infant feeding tube too high up in the bladder which can result in coiling and subsequent knotting which can be a difficult condition to manage even in the best of the hands. Early identification and referral is the key to managing such cases.

Keywords: Infant feeding tube, Per urethral catheter, Urinary retention

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Conflict of Interest
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REFERENCES
