Simple surgical solution: scaphoid type congenital megalourethra

Kashish Khanna,1 Deepak Bagga,2 Amit Kumar Jadhav,2 Rajat Piplani2

DESCRIPTION

Congenital megalourethra (CM) is an uncommon paediatric urogenital problem with less than 80 reported cases1 and may go ignored for years. It is defined as dilatation and elongation of the penile urethra associated with the deficiency of the corpora cavernosa and/or spongiosum. It may be of scaphoid or fusiform variety. However, surgery in most cases may be challenging.

A 10-year-old boy presented with the complaint of a swelling appearing on the under-surface of the penis during voiding since birth. This persisted even after micturation and had to be milked out post voiding. His urinary stream was of good calibre and normal volume. There was no associated history of urinary tract infection or obstruction. External genital examination was normal with bilateral descended testes, stretched penile length=4.5 cm, normal prepuce and normally positioned urethral meatus. However, dilatation of the dorsal penile shaft was observed during micturation. A retrograde cum voiding cystourethrography revealed dilatation of the anterior urethra (maximum diameter=1.68 cm), normal posterior urethra, urinary bladder and no reflux (figure 1A, B). With the provisional diagnosis of CM, the child was taken up for surgery.

Under general anaesthesia, child in supine position, after ruling out distal obstruction, a midline skin incision was given over the protuberant portion of the dorsal penile shaft. It was developed in layers of the scaphoid congenital megalourethra. (B) Lay open of anterior dilated megalourethra. (C) Marking and tapering off excessive urethra. (D) Tubularisation over no.10 infant feeding tube in two layers. (E) Complete repair post dressing removal. (F) Postoperative disappearance of dorsal penile shaft swelling during voiding and a good urinary stream.

Figure 1 (A) Micturating cystourethrogram showing the dilated anterior urethra, normal posterior urethra and bladder with no vesicoureteric reflux. (B) Retrograde urethrogram showing scaphoid-like dilatation of the anterior urethra.

Figure 2 (A) Vertical midline incision till the mucosa of the scaphoid congenital megalourethra. (B) Lay open of anterior dilated megalourethra. (C) Marking and tapering off excessive urethra. (D) Tubularisation over no.10 infant feeding tube in two layers. (E) Complete repair post dressing removal. (F) Postoperative disappearance of dorsal penile shaft swelling during voiding and a good urinary stream.

Figure 2
by most surgeons in such cases of CM. An IFT has commonly been used as a urethral stent in hypospadias repair. Similarly, in our case, an IFT served as an atraumatic, cheap and easily available per-urethral stent. Unlike a catheter which may not deflate completely and cause subsequent trauma to the repaired suture line during removal, an IFT could be removed smoothly with utmost ease. Few other authors have reported good results with similar technique of reduction urethroplasty in isolated cases of scaphoid CM.1 2 However, the surgical techniques for repair of CM have not yet been standardised because of the small number of cases reported in literature.

Contributors The case was admitted under the care of DB. All authors were involved in the diagnosis and management of this case. The child was operated upon by DB and AKJ, and KK has collected the data, envisaged and drafted the manuscript. The revision of the manuscript was done by DB, KK, RP and AKJ. All authors have approved the manuscript for final submission.

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REFERENCES

Learning points

► Congenital megalourethra can present for the first time even in boys of prepubertal age group.
► A good quality preoperative cystourethrogram is necessary to plan the type of surgery.
► Urethral tapering, tubularisation, spongious cover with double breasting of dartos tissue and skin closure offer a simple surgical solution in scaphoid variety of megalourethra.