Giant urethral calculi

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Giant urethral calculi are rare. Most urethral calculi migrate from the urinary bladder. Urethral calculi are rarely formed primarily in the urethra proximal to the urethral stricture or in the diverticulum.

DISCUSSION

The majority of urethral calculi occur in males; most of them are expelled from the urinary bladder. Rarely, a calculus may form primarily in the urethra when a urethral stricture or diverticulum is present. Urethral calculi represent less than 1% of all urinary stone disease. A calculus progressing through the normal urethra may stop anywhere in the urethra.

A review of 361 cases found that 41.2% of the calculi were in the posterior urethra, 18.8% in the bulb, 28.4% in the scrotal and penile portions of urethra and only 11.3% in the fossa navicularis. Calculi that migrate to the urethra obviously have the same constituents as the urinary bladder or upper tract because they originate either in the urinary bladder or kidney.

While urinating, a patient with a urethral calculus may experience a sudden stop and therefore be unable to empty the bladder. Difficulty in micturition occurs when the calculus is lodged in the posterior urethra.

A calculus may be present in a diverticulum of the urethra for an extended period without producing symptoms. Urethral discharge may be observed, as a result of an infection.

Treatment is influenced by the size shape and position of the calculus and status of the urethra.

Figure 1. Stone in urethra.

Figure 2. Stone being retrieved from meatus after meatotomy.

CASE REPORT

A 60-year-old man presented with a complaint of a hard mass in the subnavicular fossa for the past 10 years. He had had minimal discomfort in micturition for the past 2 years but was able to manage with it. He had a history of passing a calculus of 1 cm diameter 15 years ago.

On examination, a hard mass of 7x5x4 cm was palpable in the subnavicular fossa (*Figure 1*). Rectal examination was normal.

Urine culture and sensitivity showed no growth, the renal parameters, metabolic work-up, plain X-ray and ultrasound scans of the kidney, ureter and bladder area were all normal. X-ray of the penis showed a large calculus in the subnavicular fossa

Meatotomy was done and a calculus of 6x4x3.5 cm was extracted (*Figure 2*), which weighed 40 g. The meatus was reconstructed with Blandy's flap. The postoperative period was uneventful.

CONCLUSION

This case is reported because of the rarity of its size with minimal discomfort in micturition. In this case, a small vesical calculus would have migrated to the urethra and grown in size gradually over 10 years. HM

Further reading

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