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Extra-abdominal cryptorchidism associated with gastroschisis and impacted urethral calculus: two uncommon urologic conditions in one patient.

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ABSTRACT

The testis is rarely encountered within the organs prolapsed outside the abdominal wall defect of patients with gastroschisis. Optimal treatment strategy of this unusual type of cryptorchidism remains undefined, with less than 30 cases reported to date. We describe a new case where simple relocation of the testis into the abdomen was followed by spontaneous testicular descent.

Additionally, he developed a urinary calculus impacted in the navicular fossa 4 years later. Given the rarity of the two conditions, the probability of their co-occurrence is exceptionally rare, especially considering that they seem to be causally and temporally unrelated to one another.

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MAIN TEXT

Gastroschisis is a rare malformation where internal organs extend outside of the abdomen through a hole next to the belly button. Notably, also gonads may become seldom prolapsed, with testis much less frequently involved than ovary. Optimal management of such unusual extra-abdominal cryptorchidism remains undefined, with less than 30 cases reported to date.¹⁻⁸ Upfront treatment options include orchiopexy or testicular relocation into the abdomen awaiting spontaneous descent. That was the case with our patient, whose prolapsed testicle made its way into the ipsilateral hemiscrotum by 1 month of age (Figure 1).

At 4 years of age, the child sought care for progressive difficulty voiding and a hard mass stuck at the tip of his penis (Figure 2). Physical examination revealed a calculus impacted in the navicular fossa and peeping through the external urethral meatus. He uneventfully underwent stone extraction with grasping forceps under intravenous sedation and without urethral injury. Urethral stones comprise 1–2% of all genitourinary calculi, with anterior urethra being involved in only 12% of cases.^{9,10} The co-occurrence of extra-abdominal cryptorchidism associated with gastroschisis and impacted urethral calculus is exceptionally rare, especially considering that the two conditions seem to be causally and temporally unrelated to one another.

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FIGURE CAPTIONS

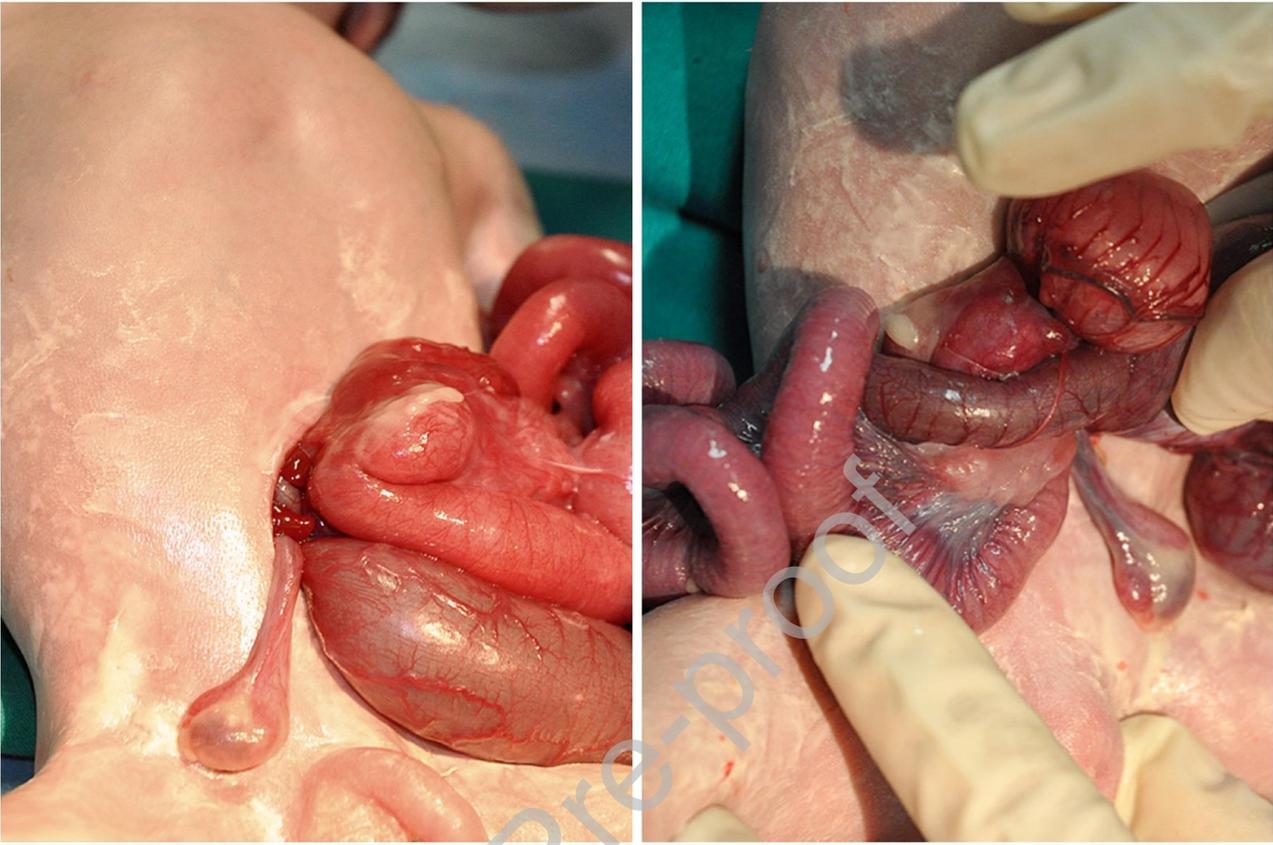


Figure 1.

Close-up view of right testis prolapsed outside the abdomen in a newborn with gastroschisis. The left testis was in the scrotum. The prolapsed testis was relocated into the abdomen and sequential reduction of remaining herniated viscera initiated.



Figure 2

Close-up view of a urinary stone impacted in the navicular fossa and peeping through the external urethral meatus (top). The stone (< 10 mm in size) was extracted using a grasping forceps and a Foley catheter inserted in situ for 24 hours postoperatively.