

Urinary bladder inguinal hernia: an uncommon cause of scrotal swelling

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A 77-year-old man with benign prostate hypertrophy (BPH) presented to our hospital in October 2011 with a history of right groin swelling for several months. He was otherwise asymptomatic. Physical examination revealed a reducible right inguinal hernia. Ultrasound (USG) examination of the groins showed a fluid-filled lesion within the right scrotum. It had a beaked appearance at its cranial portion, which could be traced entering the right inguinal canal (Fig 1a). A tiny calcified focus was noted within this fluid-filled structure (Fig 1b). The normal right

testis was displaced inferiorly (Fig 1c). Findings were suggestive of urinary bladder inguinal hernia with a bladder stone within. It was confirmed with non-contrast computed tomography (CT) of the abdomen and pelvis, which showed herniation of the urinary bladder along the inguinal canal and into the right scrotum, with a small bladder stone within (Fig 2).

Urinary bladder herniation is an uncommon condition, encountered in 1% to 4% of inguinal hernias. However, over the age of 50 years, the frequency increases to about 10%.¹ Most patients

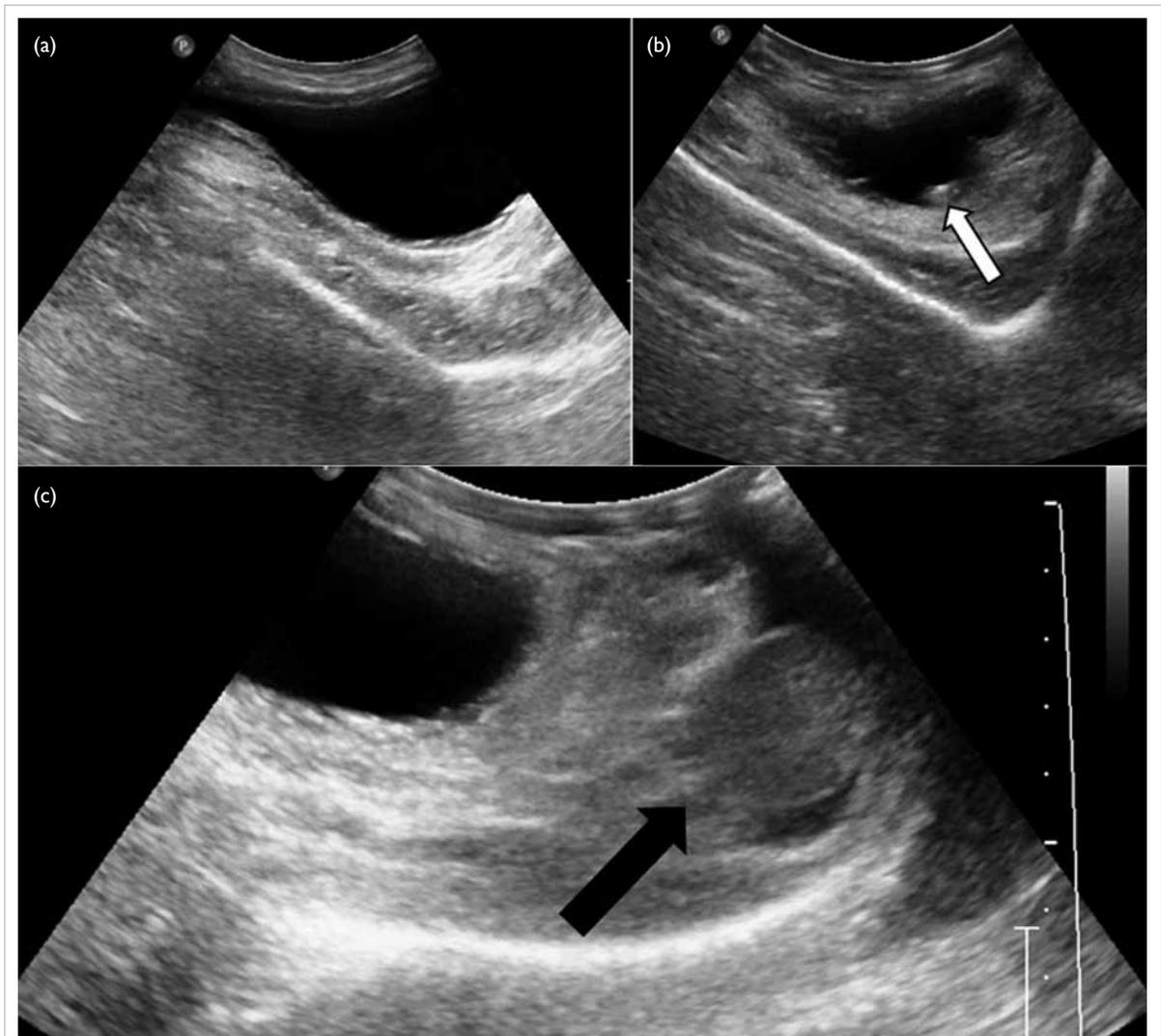


FIG 1. (a) Ultrasonography demonstrates a fluid-filled structure with a beaked appearance within the right scrotum. (b) A tiny calcified focus within the fluid-filled structure in the right scrotum is seen (white arrow). (c) A normal right testis is displaced inferiorly by the fluid-filled structure (black arrow)

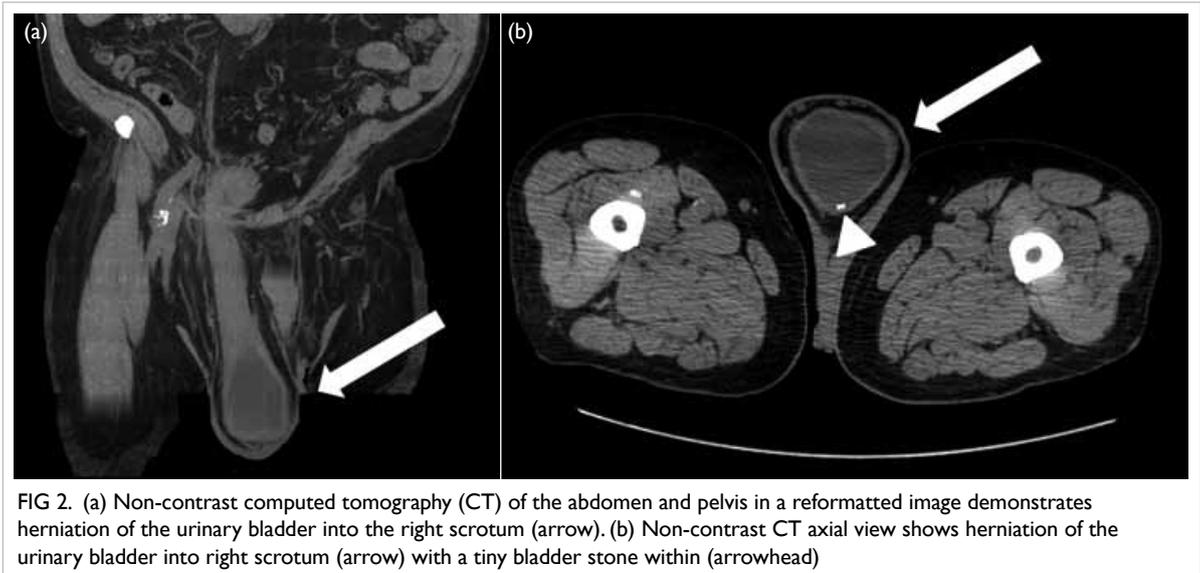


FIG 2. (a) Non-contrast computed tomography (CT) of the abdomen and pelvis in a reformatted image demonstrates herniation of the urinary bladder into the right scrotum (arrow). (b) Non-contrast CT axial view shows herniation of the urinary bladder into right scrotum (arrow) with a tiny bladder stone within (arrowhead)

are asymptomatic and usually found incidentally on imaging for workup of inguinal hernias, or even at the time of herniorrhaphy. Occasionally, patients may complain of urinary symptoms especially at an advanced stage, and may entail double-phase urination, that is, manually compressing the scrotum for complete bladder emptying. Predisposing factors include obesity, bladder outlet obstruction (eg due to BPH), and weakened abdominal musculature.² Imaging modalities including USG, intravenous urogram, CT, and magnetic resonance imaging usually facilitate the diagnosis. Standard treatment entails surgical repair. It is important to be aware of this diagnosis, as apart from complications like urinary tract obstruction, urinary traction infection and urinary bladder infarction, unknowing herniorrhaphy may lead to bladder injury.^{1,3}

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