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SURGICAL IMAGES

Management of Lindbom's hernia (ureterosciatic hernia)

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Summary Lindbom's hernia is very rare; treatment in symptomatic patients is hernia reduction. This can be temporary, performed endoscopically, but definitive cure is surgical. The surgeon can choose between simple reduction or resection followed by anastomosis of the involved ureteral segment, occasionally with associated hernioplasty.

We describe the case of Lindbom's hernia discovered in an 80-year-old woman without any otherwise remarkable history who came to the emergency department complaining of acute right lumbar pain. Laboratory tests revealed a marked inflammatory syndrome (high white blood cell count and C-reactive protein at 224 mg/l). The abdomino-pelvic CT scan identified a Lindbom hernia with perirenal infiltration and signs of pyelo-ureteritis (Figs. 1 and 2). The patient received antibiotics and a ureteral stent was placed. Retrograde uretero-pyelography identified a ''curlicue ureter'', a pathognomonic sign (Fig. 3). The patient underwent robotic-assisted laparoscopic ureteral resection and anastomosis over a double-J stent. It was impossible to dissect the incarcerated segment of ureter and it was left in place (Fig. 4). It was deemed unsafe to insert any prosthetic material because of the infective risk (potential urinary contamination).

Lindbom's hernia remains exceptional [1]. Effectively, the sciatic foramen is a transition zone between the pelvic and gluteal regions. The sciatic foramen is bridged by the piriformis muscle; herniation occurs either because of atrophy or abnormal development of the piriformis muscle. Simple surveillance is possible in asymptomatic patients. Ureteral stent placement, usually iterative, is the solution for patients who are too fragile for surgery, or candidate for palliative treatment [2]. Surgical repair is recommended for all symptomatic patients. The gluteal approach is no longer considered the best. Laparotomy is reserved for patients with intestinal obstruction.

Hernia reduction followed by simple suture repair or prosthetic hernioplasty can be performed laparoscopically [3]. Ureteral reconstruction consisting of segmental resection is sometimes necessary but this exposes the operative field to potential urinary contamination. In our case, we were not able to reduce the hernia and decided to leave the unresected segment of ureter in place to obturate the foramen.

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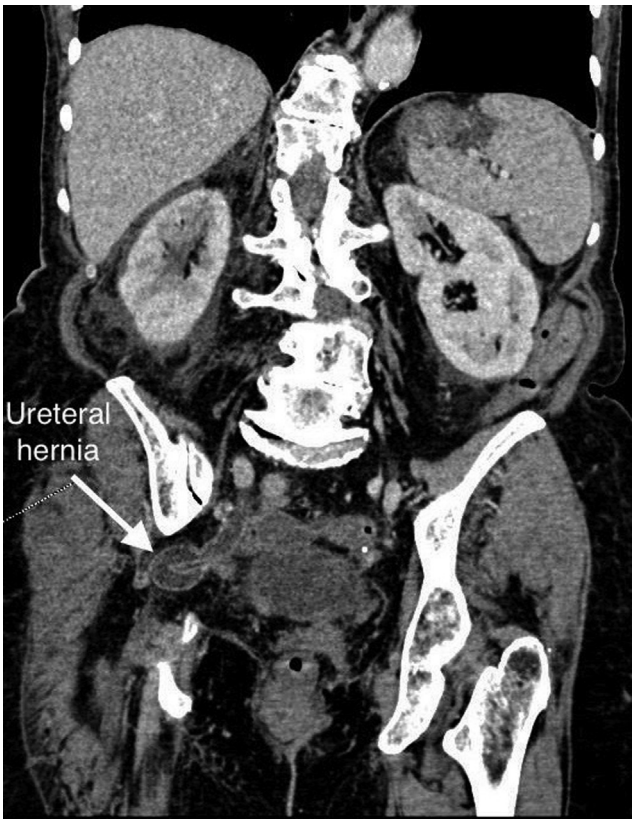

Figure 1. Frontal CT scan showing the trans-sciatic passage of the ureter.

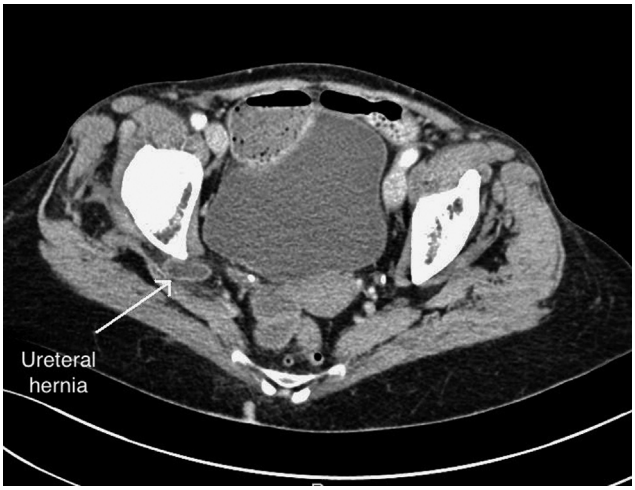

Figure 2. Transversal CT showing the trans-sciatic passage of the ureter.

Disclosure of interest

The authors declare that they have no competing interest.

References

[1] Lindbom A. Unusual ureteral obstruction by herniation of ureter into sciatic foramen. Acta Radiol 1947;28:225.
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[3] Gee J, Munson JL, Smith J. Laparoscopic repair of ureterosciatic hernia. Urology 1999;54:730.

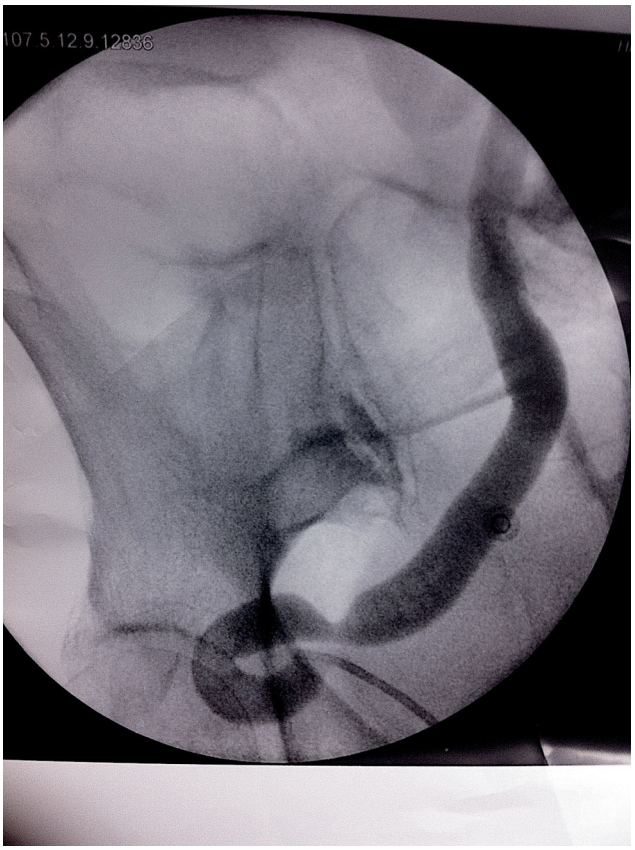

Figure 3. Intraoperative retrograde urethropyelography ''Curlicue ureter sign''.

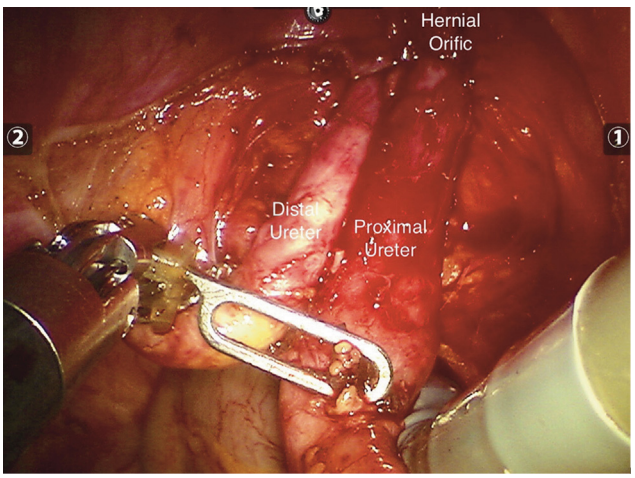

Figure 4. Intraoperative image by robotic-assisted laparoscopic reconstruction. Failure of hernia reduction because the ureter was fixed in the foramen, making is necessary to perform a segmental resection. The resected segment was left in place to obturate the hernia orifice. No prosthetic hernioplasty was performed because of the risk of urinary contamination. The uretero-ureterostomy was protected by a double-J stent.