# Hydronephrosis Secondary to Sliding Inguinal Hernia Containing the Ureter

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### INTRODUCTION

Herniation of the ureter occurs infrequently in a sliding inguinal hernia. Significant herniation may cause ureteral

obstruction leading to hydronephrosis. (1,2)

### CASE REPORT

A 62-year-old man presented with the left flank pain. Physical examination revealed a left reducible inguinal hernia. Ultrasonography showed a mild left ureterohydronephrosis. Computed tomography scan demonstrated a loop of the left ureter in the inguinal hernia sac (Figures 1 and 2).

At operation, a large indirect sliding inguinal hernia was found. The ureter was dissected free of the sac, then reduced, and herniorrhaphy was done. Convalescence was uneventful and follow-up ultrasonography showed resolving of the left hydronephrosis.

### DISCUSSION

Scrotal herniation of the ureter is an extremely rare and often misdiagnosed condition with



**Figure 1.** Computed tomography scan showing left ureterohydronephrosis and looping of the ureter into the inguinal hernia.

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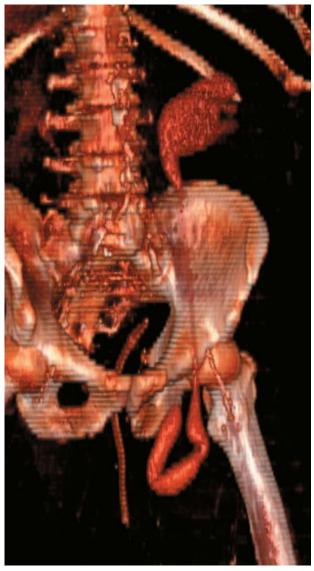


Figure 2. 3D abdominal and pelvic computed tomography scan.

possible serious surgical complications. It is often determined during inguinal hernias surgery or sometimes fortuitously. (1) Most reported cases

have occurred in obese men during the 5<sup>th</sup> and 6<sup>th</sup> decades of life.<sup>(2,3)</sup> However, there may be another factor, such as the existence of a redundant ureter, which is located over the spermatic cord.<sup>(4)</sup>

Two anatomical variations of ureteral hernia have been reported. Almost in 80% of cases, the ureter slides beside the peritoneal sac (paraperitoneal type), which frequently contains other sliding organs, usually the colon. The other is characterized by the absence of a peritoneal sac; the herniated ureter is hidden within the retroperitoneal fat (extraperitoneal type). (2,4)

Herniation of the ureter may cause ureteral obstruction leading to hydronephrosis. Surgeons must be aware of this condition in order to carefully preserve ureteral integrity and avoid ureteral injury during hernia repair.

## CONFLICT OF INTEREST

None declared.

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