Renal Nutcracker Syndrome: Old-School Approaches Still Prevail A Case Report

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Objective:

To present the case of a 23-year-old female patient diagnosed with nutcracker syndrome, confirmed by angioCT, who underwent a left renal vein transposition.

Methods:

A 23-year-old patient with left flank pain, abdominal distension, and hematuria was diagnosed with Renal nutcracker syndrome via Doppler Ulrasoun and AngioCT. Initially managed as a urological condition, her symptoms persisted, AngioCT showed an enlarged left renal vein compressed between the aorta and the superior mesenteric artery. A multidisciplinary team involving vascular and transplant surgeons decided to perform a left renal vein transposition. The procedure included a median mini supraumbilical laparotomy, dissection of the left renal vein, and T-L anastomosis of the left renal vein to the inferior vena cava. Clamping and ligation of the adrenal, gonadal, and lumbar veins were followed by a thorough hemostatic control and closure.

Results:

The patient recovered adequately postoperatively, with normal urinary output (1.2 cc/kg/h) and paraclinical results. She was discharged after 72 hours on acetylsalicylic acid (100 mg/day). Follow-up angiography at three months confirmed no residual compression of the left renal vein. The surgery, coordinated between vascular and transplant surgeons, was successful in resolving symptoms and preventing further complications.

Conclusion:

This case highlights the importance of a multidisciplinary approach in managing nutcracker syndrome, considering the potential need for non-standard surgical procedures, including autotransplantation. It serves as an example of how collaboration between two specialties can result in the best possible outcomes for the patient. The combined efforts of the multidisciplinary team and the chosen surgical intervention successfully alleviated the patient s symptoms and led to significant clinical improvement.

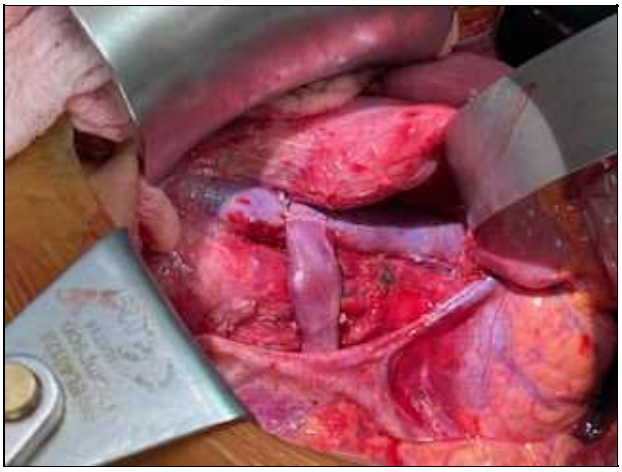

Fig 1 Renal Nutcracker Syndrome: Fibrotic band observed over the left renal vein

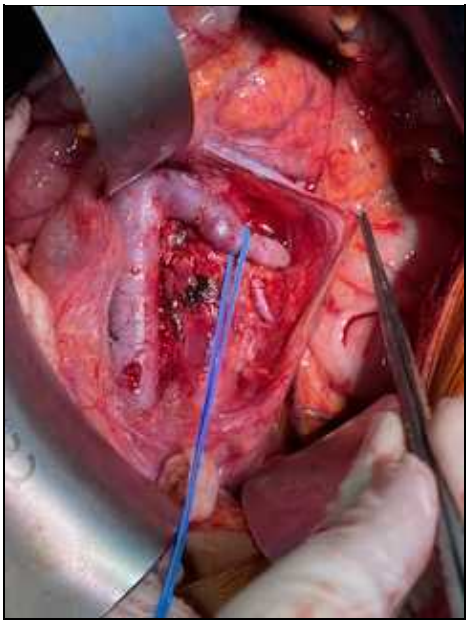

Fig 2 End-to-side anastomosis of the left renal vein completed following left renal vein transposition