

## **ROLE OF RENAL AUTOTRANSPLANTATION IN THE LOIN-PAIN HEMATURIA SYNDROME**

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**BACKGROUND:** The loin-pain hematuria syndrome (LPHS) is a poorly defined disorder primarily of young women, characterized by severe and recurrent flank pain and microscopic or macroscopic hematuria, in whom no cause has been found after comprehensive investigation. Renal autotransplantation as a form of denervation therapy has been used for treatment of the intractable pain. We describe our experience with a patient with LPHS who underwent renal autotransplantation.

**CASE REPORT:** A 32-year-old Caucasian female nurse was hospitalized with severe and recurrent right-sided flank pain and gross hematuria. Her renal function was normal. Infection, nephrolithiasis and other renal pathologies were excluded by computed tomography imaging, intravenous pyelogram with computed tomography, bilateral renal angiography and cystourethroscopy with bilateral retrograde pyelogram, all of which were unremarkable. She was diagnosed with LPHS and renal autotransplantation was recommended in view of her incapacitating pain requiring high-dose parenteral opioid analgesics. Following the surgery, she had complete resolution of her pain. This lasted for about four months when her pain recurred. She again required high-dose parenteral opioids for pain control and died tragically at home a few weeks later of an overdose of her analgesics.

**DISCUSSION/CONCLUSIONS:** Renal autotransplantation results in disruption of the autonomic and sensory innervation of the kidney, leading to resolution of the pain. However, the disruption of the innervation may not be permanent since studies have shown that regeneration of sympathetic nerve fibers occurs in a majority of human renal allografts following renal transplantation. It is possible that sensory reinnervation of the transplanted kidney is responsible for recurrence of the pain after autotransplantation. Renal autotransplantation as a treatment option for patients with LPHS should be considered with caution.

**Keyword:** Flank Pain, Hematuria , Renal Transplantation