



Left renal artery clamping during left renal vein transposition for nutcracker syndrome



66th ESCVS
International Congress of the European Society
for Cardiovascular and Endovascular Surgery



11-14 May, 2017
Thessaloniki - Greece
Makedonia Palace Hotel
www.escvs2017.org

Organizing - Administrative Bureau / Secretariat:
Confere Ltd. "The Art of Bringing People Together", Stavrou Niarchou Ave., Marousi Position GR 455 00 Pedin, Ioannina, Greece,
Tel: (+30) 26510 68610, Fax: (+30) 26510 68611, E-mail: info@confere.gr; website: http://www.confere.gr

Kerzmann A, Holemans C, Boesmans E, Defraigne JO
CHU of Liège, Belgium



66th ESCVS Congress, Thessaloniki, Greece, May 11-14, 2017

Background

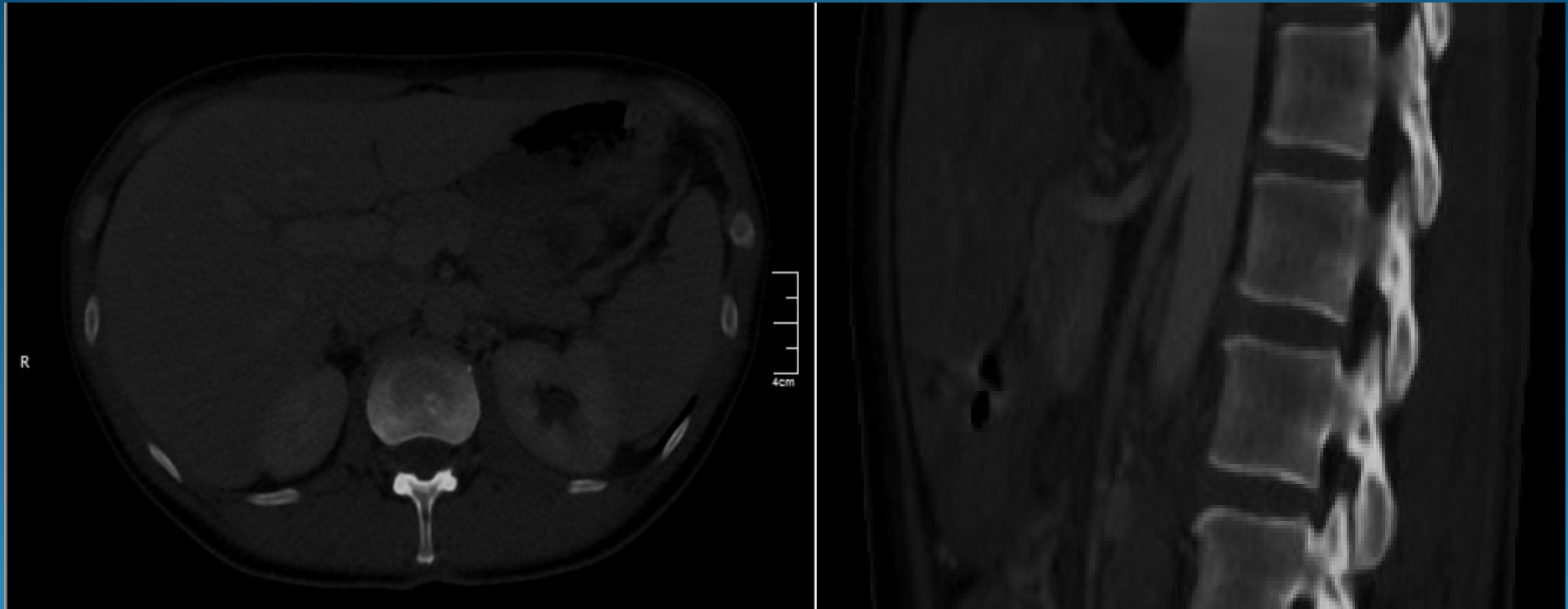
- Nutcracker syndrome is the result of the left renal vein **compression** between the aorta and the superior mesenteric artery.
- Symptoms are left flank **pain**, **hematuria** and pelvic venous **congestion**^{1,2}.
- **Some** patients may need surgical management. There are 3 options: open surgery, laparoscopic surgery or endovascular approach¹.

Background

- Left renal *vein transposition* is a safe and effective procedure to release the symptoms².
- Massive hematuria can happen *during* the operation³.
- We report one case of left renal vein transposition *with left renal artery clamping* to avoid left kidney acute venous hypertension.

Case report

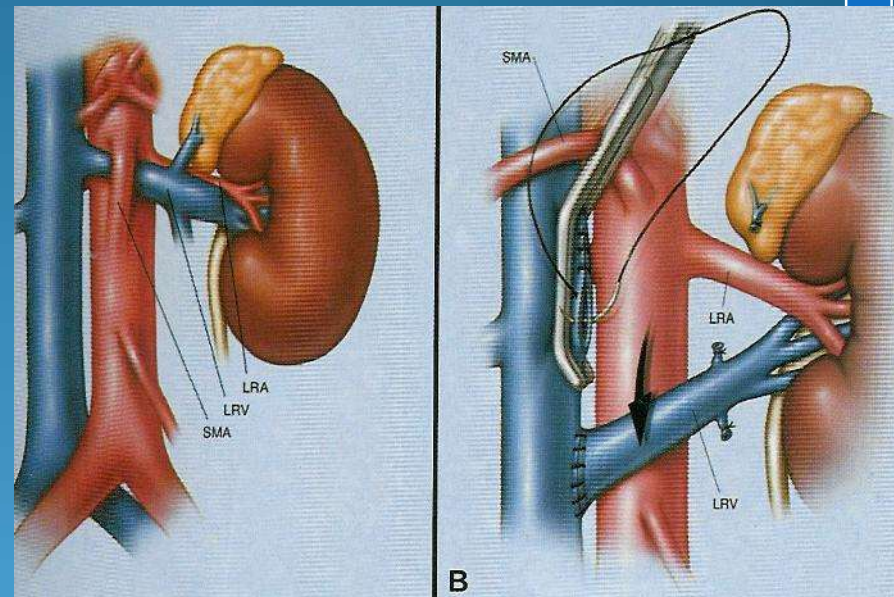
- 47 years old caucasian woman
- past history of smoking habit and fibromyalgia
- left unilateral macroscopic **hematuria** and left flank **pain** since 6 months
- ultrasonography, urological endoscopies, computed tomography and magnetic resonance imaging lead to the diagnosis

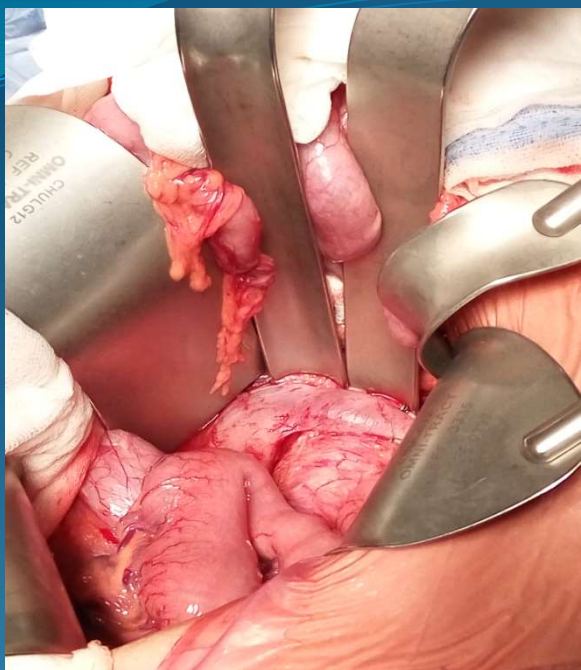


compression of the left renal vein
varicosities around the left kidney

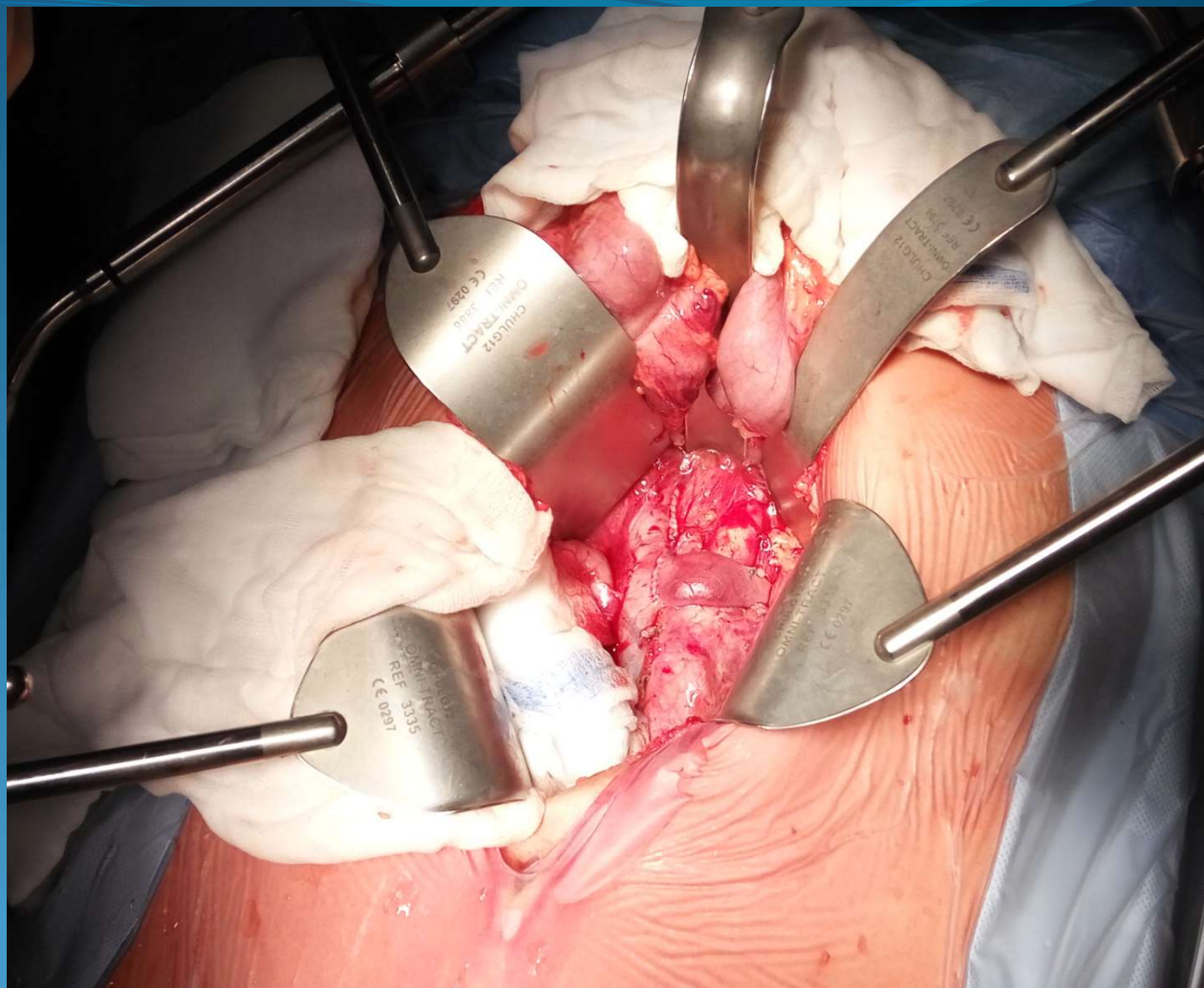
Case report

- general anaesthesia
- supra-umbilical laparotomy
- ligation of the left gonadal and adrenal veins
- vein **and artery** clamping
- left renal vein transposition distally into the inferior vena cava





19 min of clamping
no complication



free of symptoms one year after

References

- ¹ Ananthan K, Onida S, Davies AH. Nutcracker syndrome: an update on current diagnostic criteria and management guidelines. Eur J Vasc Endovasc Surg 2017; Epub ahead of print.
- ² Reed NR, Kalra M, Bower TC, Vrtiska TJ, Ricotta JJ, Gloviczki P. Left renal vein transposition for nutcracker syndrome. J Vasc Surg 2009;49(2):386-94.
- ³ Andrienne R, Limet R, Waltregny D, de Leval J. Hematuria caused by nutcracker syndrome: peroperative confirmation of its presence. Prog Urol 2002;12(6):1323-6.