

## **THE PUCASI: VESICO-SACRAL HITCH AND BILATERAL URETERAL RE-IMPLANTATION. A NOVEL TECHNIQUE FOR BILATERAL MID URETERAL INJURIES.**

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**INTRODUCTION:** To present the Pucasi Vesico-Sacral Hitch and Bilateral Ureteral Re-implantation, an alternative and novel surgical technique for bilateral mid ureteral injuries. We report surgical long term outcomes.

**METHODS:** From February 2013 to date we performed 2 Pucasi Vesico-Sacral Hitch and Bilateral Ureteral Re-implantations. Both patients underwent open abdominal approach hysterectomies due to large uterine fibromas (mean patient age 41 years old). Both patients were found post operatively with mid ureteral injuries. One patient underwent immediate urological reconstruction on postoperative day #1 (POD#1), the second patient underwent bilateral percutaneous nephrostomies and delayed urological repair elected due to patient unstable clinical status. Description of technique. Ureterolysis as usual. Lateral bladder attachments divided without compromising vascularity, bladder opened in semilunar, transverse fashion and fixed to the anterior longitudinal ligament over the sacral promontory. Bilateral ureteral re-implantation in Politano-Leadbetter technique, bladder closed longitudinally using the Heineke-Mikulicz principle. Bilateral ureteral DJ catheters and large bore foley catheter left in place.

**RESULTS:** Using the Pucasi Vesico-Sacral Hitch and Bilateral Ureteral Re-implantation, an additional cephalad bladder length up to 5cm can be achieved, as well as bilateral ureterolysis for an additional 2-3 cm in ureteral advancement. Patient mean follow up was 6.5 months (range 6-7 months). Ureteral anastomosis stricture rate: 0%, transfusion rate: 0%, neuropathy: 0%, voiding dysfunction: 0%.

**CONCLUSION:** Bilateral mid ureteral injuries are a quite challenging surgical scenario Urologists may encounter. The Pucasi Vesico-Sacral Hitch and Bilateral Ureteral Re-implantation is a surgical technique adequate for bilateral ureteral defects up to 8cm in length, in patients with atrophic Psoas tendons and in the acute or delayed reconstructive setting, with minimal morbidity, complications and voiding dysfunction, without compromising bladder vascularity.