INTRACORPOREAL LITHOTRIPSY OF LARGE CALCIUM OXALATE MONOHYDRATE BLADDER STONES WITH THE LITHOSPEC DEVICE
Department of Urology, University of Rome “La Sapienza”, Italy.

INTRODUCTION: Treatment of bladder stones depends on size and hardness of the stones. Small stones, up to 2 cm., can usually be grasped with the Mauermayer stone punch, while larger stones need to be treated by means of intracorporeal lithotripsy first, and punched afterwards.

MATERIALS AND METHODS: A 76 years old man suffering from BPH and two larger bladder stones, underwent intracorporeal lithotripsy of the stones by means of the Lithospec device which uses ballistic energy. The 1,6 mm. Diameter probe was used through a nephroscope and showed with high energy level a rapid fragmentation of the stones which could be then completely punched. Chemical analysis showed a calcium oxalate monohydrate composition of the stones.

DISCUSSION: Intracorporeal lithotripsy of large bladder stone includes ultrasound, laser, and electromagnetic energy; the efficacy of the procedures depends on size and hardness of the stones. The Lithospec uses electromagnetic energy to deliver high impact mechanical fragmentation power directly on the stone, without any risk of thermal or mechanical damage.

CONCLUSION: In our experience the Lithospec is a compact device which provided a safe and reliable fragmentation of both ureteral and bladder stones including cystin and calciumoxalate monohydrate ones.