PP04
Pro ESWL – Treatment in the era of modern endourology
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Objective: In the era of modern endourology extracorporeal shockwave lithotripsy (ESWL) still represents a well-established and effective treatment for urinary stones. Our study is based on a single center experience and it was designed to reassess the indications of ESWL, the technique, complications and long term results of the method.

Materials-Methods: From 1991 to 2014, 11724 patients (with age ranging from 3 to 96 years) underwent ESWL treatment for urinary stones in our center - 25436 ESWL procedures were performed. We used three different lithotriptors. The investigational protocol includes: reno-vesical ultrasound, IVP, CT scan, renal scintigraphy, renal function tests, hemoleucogram, coagulogram, urinalysis, uroculture. General intravenous anesthesia has been used in 6469 cases.

Results: The overall “stone-free” rate (SFR) was 91%. CIRF (Clinical Insignificant Residual Fragments) were noticed in 5.5% of cases, most of them patients with history of multiple operated lithiasis and residual hydronephrosis. In 3.5% cases ESWL was inefficient or patients developed complications. The late follow-up protocol includes: renal function tests (BUN and creatinine level), blood pressure, ultrasound, IVP or renal scintigraphy and skeletal radiography. No late complications (renal failure, skeletal deformation, blood hypertension) were noticed during a mean follow-up period of 54 months.

Conclusions: ESWL is still a golden standard treatment in stone therapy. It is an effective treatment in patients with urinary stones - SFR was 91%. Good results depend on correct indications. ESWL is the method of choice in most cases of urinary lithiasis as a single treatment or combined in a multimodal therapy. It can be safely performed without long term side effects.