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Introduction & Objectives: Ancillary treatments and hospital admission for pain or fever are frequently encountered after extracorporeal shockwave lithotripsy (SWL). Therefore, the aim of the present study was to investigate the rate of readmissions after SWL and the finally results of the ancillary treatments.

Materials & Methods: From January 2018 to December 2018, 174 (122 male and 52 female) patients undergoing SWL using electromagnetic lithotripter machine (PiezoLith 3000) for renal and upper ureteral stones ≤ 20 mm were retrospectively reviewed. The cohort was subdivided into two groups according to stone attenuation values (HU); Group 1 < 1000 HU (n:37), Group 2 >1000 (n:50). The parameters included the age of the patients, body mass index, features of stones, locations, number of shocks and stone clearance rate after the ancillary treatments. Both groups were compared in terms of reasons of the readmission, complications, ancillary treatments, finally results after the ancillary treatments.

Results: Demographics values were summarized in Table 1. The overall complication after ESWL occurred in 70 (40,2%) patients. The complication rates were similar in both groups (29,7 % vs 48%, p=0,086). Urinary tract infections and colic pain were the most commonly observed. In terms of types and grades of complications were similar in both groups. The success rates of ESWL were higher in group 1 than group 2 (67,5% vs 28%, p<0,001). An ancillary treatments were required in 14 (37,8%) and 37 (74%) patients in group 1 and 2, respectively (p=0,001). Antibiotherapy and ureteroscopy are the most ancillary treatments for the patients who were presented with fever and stone street or colic pain after ESWL. The success rates were higher in group 1 (83,7%) than group 2 (54%) after the ancillary treatments (p=0,004) **Table 1**

	Group 1 (<1000 HU)(n:74)	Group 2 (>1000 HU) (n:100)	P value
Age (year), ave. \pm SD	43,7 \pm 15,4	42,8 \pm 12,5	0,782*
Gender, n(%)			0,163 [¥]
M	46 (62,1)	76 (76)	
F	28 (37,8)	24 (24)	
BMI (kg/m ²),ave. \pm SD	27,9 \pm 3,4	29,0 \pm 3,2	0,159*
Side n(%)			0,757 [¥]
Right	36 (48,6)	52 (52)	
Left	38 (51,3)	48 (48)	
Number of stones			0,972 [¥]

1	56 (75,6)	76 (76)	
>2	18 (24,3)	24 (24)	
Stone size(mm), ave. \pm SD	8,5 \pm 2,5	10,3 \pm 3,2	0,005**
Stone load(mm), ave. \pm SD	9,9 \pm 3,8	11,8 \pm 4,6	0,039**
Total energy [U]	92.2 \pm 24.4	89.97 \pm 33.4	0.496
Stone-skin distance (cm), ave. \pm SD	11,0 \pm 2,5	11,5 \pm 2,1	0,247*

Conclusions: In patients with high-density stones, treatment failure and the need for additional intervention can often be observed. This should be considered by urologists and patients should be informed about the need for additional treatment.