



Comparison of Managements of upper ureteric stone: Extracorporeal Shock Wave Lithotripsy (ESWL) versus Semirigid Ureteroscopy with holmium:(YAG) laser lithotripsy in Ibn Sina and Doctors Clinic Hospitals(September 2021 –June2022).

Mohanned Ibrahim(1),Tarig Hassan(2) ,AhmedM.nour Wishah(3)

Background and Aim :

kidney and ureteric stones are the third most common cause of pain worldwide and causes much suffer for the patient and his family. Different parts of the world may have different availability of specific treatments, and one approach might be preferred over the other for reasons such as physicians' experience, economy or material resources.

Objectives: To compare the outcome of management of upper ureteric stone using extracorporeal shock wave lithotripsy versus semirigid ureteroscope lithotripsy in Khartoum (September 2021 – June 2022).

Methodology:

This study is a descriptive comparative analytical hospital-based study, it was conducted in Ibn Sina and doctor's clinic hospitals during the period from September 2021 to June 2022. The study involved 100 patients who were divided into two groups, the data were collected by the primary researcher using a comprehensive close ended questionnaire, then was entered, and analyzed using SPSS 25.0

The Result:

Two third of the patient aged between 41 – 70 years, 62% are males, and 38% are females. 55% of stones size ranged between 5 –10 mm, most of patients 98% had single stones. In 65% of the patients the stone density was between 400 - 1000 HU. The most frequent comorbidities are hypertension and diabetes mellitus. In 70% of the patients, the decisions was made by the treating doctor. Although patient who underwent ureteroscopy had higher clearance rate of their stones, there was a significant correlation between URS with double J insertion, migration, management of migration, pain, hematuria, and urgency.

Conclusion:

Ureteroscopy have higher success rate compared to ESWL and have less pain and hematuria post-operatively.

		Method		Total	P value
		ESWL	URS		
Stone free	Yes	35	42	77	0.09
	No	15	8	23	
Migration to PCS	Yes	2	8	10	0.045*
	No	48	42	90	
Management of Migration	ESWL	2	4	6	0.6
	PCNL	0	4	4	

**Significant correlation*

Of the 50 patients who underwent URS, 42 patients (84%), had clearance of their stones. In most patients in the URS group (45 patients), double stent was inserted at the end of the procedure. Table (6) Eight patients (16%) of the URS group had proximal migration of their stones into the pelvi-calyceal system. These were treated by ESWL (4patients) and PCNL (4 patients). The stone clearance was less in in the ESWL group. Thirty five patients (70%) had clearance of their stones. Fifteen patients needed further ESWL sessions. Only two patients in the ESWL group had proximal migration of stones to the pelvicalyceal system. One patient developed acute | ureteric obstruction and needed double J stent insertion.

Figure.

- (1)MD Urology, Urologist,Alsalam suadi hospital, Yemen
(2) MD Urology,Consultant,,Faculty of Medicine
National Ribat University,Sudan
(3) BSc.BGD MLT , Laboratory Scientist Omdurman Islamic University

Contact:

- (1)Mohanned Shames Eldeen Abobaker Ibrahim
Mohanned.Shames10@Gmail.com
00249116489233
(2)Dr. Tarig Hassan Hag Ali
(3)Wishah Mohammednour Ahmed