

The survey of kidney ultrasonography results and it's utility in evaluation of patients with renal colic complain in Imam hospital

Seyed mohammad hosseininejad¹, iraj goli khatir², hamed amini ahidashti³, seyede elham aghili⁴, sara ehteshami⁵, firouze sadeghi sarhangi⁶

1 -sari.emam khomeininhospital.emergency medicine ward- mazandaran university of medical sciences, drhoseininejad@yahoo.com,

2-sari.emam khomeininhospital.emergency medicine ward- mazandaran university of medical sciences, drgolikhathir@gmail.com,

3-sari.emam khomeininhospital.emergency medicine ward- mazandaran university of medical sciences, hamedaminiahidashti@yahoo.com,

4-sari.emam khomeininhospital.emergency medicine ward- mazandaran university of medical sciences, dr.elhamaghili@yahoo.com,

5-sari.emam khomeininhospital.emergency medicine ward- mazandaran university of medical sciences, sara_eh59@yahoo.com,

6-sari.emam khomeininhospital.emergency medicine ward- mazandaran university of medical sciences, sadeqi.sarhangi@yahoo.com

Introduction: Renal colic is an emergency situation that commonly caused by kidney stones and it should be confirmed by clinical studies. This study aimed to evaluate the results of ultrasound of the kidneys in the assessment of patients with renal colic.

Methods: In a retrospective cross-sectional study, medical records of patients admitted to the emergency department with renal colic, included demographic data and information of the history, clinical and paraclinical findings (laboratory and ultrasound) were recorded and analyzed.

Result: 640 people, including 464 (72.5%) male and 176 (27.5%) female were studied. Ultrasound was observed stone in 131 patients (20.7 percent) that were in 29% of cases in right kidney, 23% in ureter and 20% in left kidney. 24.6% of men and 20.9% of women had urinary stones that difference between the two groups was not significant. 68% of patients had flank pain that was observed stone in 24.8% of them (P=0.017). Also stones were also higher in patients with pain radiation (P=0.005) and tenderness (P=0.028). Most symptoms were nausea and vomiting in 42.7%, dysuria in 20.9% and urinary frequency in 19.2% of patients. Stone was seen in 16.5% of patients who had nausea and vomiting, 19.4% of patients who had dysuria and 19.5% of patients who had frequent urination. The mean of WBC, RBC, hemoglobin, platelets, BUN and creatinine were not significantly different between the group that had kidney stones and other group.

Conclusion: Most kidney stones are in men, but there's no difference in the results of ultrasound in both genders. Flank pain with pain radiation, tenderness and urinary symptoms and also a history of kidney stones are important factors for choosing ultrasound .

Keywords: renal colic| ultrasound| emergency| urinary tract stone

