

THE Tc-99m DMSA RENAL SCAN IN FUNCTIONAL EVALUATION OF PELVIC ECTOPIC AND HORSESHOE KIDNEY

Čabarkapa V, Žeravica R, Ilinčić B, Dujmović F, Babić Lj.

Department of Nuclear Medicine, Clinical Center Novi Sad

Defect in embryological renal development may lead to ectopic or horseshoe kidney. About one third patients with this anomalies do not produce symptoms. In clinical practice the main complication of pelvic ectopic and horseshoe kidneys include the following: ureteropelvic junction obstruction, recurrent infections, recurrent stone formation.

AIM: To study results of Tc-99m DMSA renal scintigraphy in patients with renal pelvic ectopia and horseshoe kidneys.

METHODS: Retrospective analysis of 35 patients from 2002-2005 found to have pelvic ectopic (20) and horseshoe (15) kidneys on Tc-99m DMSA renal scintigraphy are presented in this study. The observation were compared with findings of other diagnostic modalities like ultrasonography and intravenous urography.

RESULTS: Pelvic ectopic kidneys were found more common among males (60%) and involved more often the right kidney(60%). Most of the pelvic ectopic kidney (80%) were hypofunctional. Horseshoe kidneys were found more common among females (60%) and the most (80%) had good function.

CONCLUSION: Renal scintigraphy reliably detects, localizes and estimate functional status of pelvic ectopic and horseshoe kidneys and it is recommended to by done in all patients with this anomalies even if detects by other diagnostic tools.