

POTENTIAL ROLE OF RENAL SCINTIGRAPHY IN DETECTION OF RENAL ANOMALIES: EXPERIENCE IN NINMAS

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Background: Congenital anomalies of the kidney are one of the most common birth defects in newborns. Except cardiac and skeletal defect, renal anomalies the third common cause of death in infant. Renal anomalies are different types like ectopic in position, cross fused ectopic, horse-shoe kidney & pancake kidney. These various types of anomalies are sometime difficult to diagnosis by ultrasonography (USG). Tc-99m Diethylenetriaminepentaacetate Acid (DTPA) renogram is an easy Nuclear Medicine (NM) technique which provides information about the functional status of kidneys along with anatomical position. Tc-99m Dimercaptosuccinic Acid (DMSA) can provide information about the anatomical position of the kidneys but not able to provide any information of the functional status of the kidneys. So DTPA renal scan is more informative than DMSA renal scan. This study aims to provide the location and function of the ectopic kidneys by Tc-99m DTPA renal scan. **Methods:** This prospective and longitudinal study was carried out at NINMAS during June 2021 to August 2024. Tc-99m DTPA renal scan done as per physician advised to see the renal function as well as it provides any renal positional and anatomical abnormalities. **Results:** In this study, 8039 patients were included. Among them only 31(0.38%) patients showed renal anomalies. Among them there was 6 (19%) was pancake, 12 (39%) was horse shoe and crossed fused ectopia was 13 (42%). **Conclusion:** Tc-99m DTPA renal scan is very important investigation for the exact localization as well as functional status of each ectopic kidney compared to other investigations.

Key words: DTPA renogram, Horse shoe kidney, Pancake kidney

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