

선천성 거대신배증과 거대뇨관증을 가지나 요로폐쇄가 없는 환자의 Tc-99m DTPA 및 Tc-99m DMSA 신장스캔 소견

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Tc-99m DTPA and Tc-99m DMSA Renal Scan findings in Patients with Congenital Megacalyces and Megaureter without Urinary Tract Obstruction

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Abstract

A 10 days old male infant with congenital megacalyces and megaureter, diagnosed by prenatal ultrasonographic screening, underwent Tc-99m DTPA renal scan for evaluation of urinary tract patency, Tc-99m DMSA scan for evaluation of renal cortical damage. He also underwent intravenous urography(IVU) and renal ultrasonography. Tc-99m DTPA renal scan demonstrates intense tracer accumulation in enlarged both renal pelvocalyses and ureters, which rapidly washout without diuretics administration. Tc-99m DMSA renal cortical scan shows no remarkable photon defect in both renal cortices and visible tracer uptake in both megaureter areas. Ultrasonographic and IVU studies show enlarged both renal calyses and bullously dilated ureters, but no dilatation in renal pelvis. Follow up Tc-99m DTPA renal scan, performed at one year later, also reveals intense tracer accumulation in enlarged both urinary tracts which rapidly washout without diuretics, and shows no significant change compare to the previous Tc-99m DTPA renal scan. Urinary tract obstruction and renal cortical damage can be easily evaluated with Tc-99m DTPA and Tc-99m DMSA scans in patients with megacalyces and megaureter.

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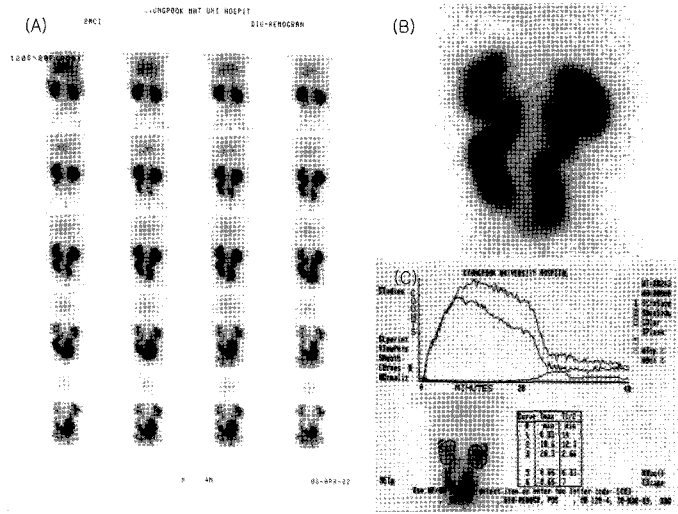


Fig. 1. Tc-99m DTPA renal scan and renography. (A) Dynamic images show intense tracer accumulation in enlarged both renal pelvises and ureters and renography show rapidly washout of renal radioactivity without diuretics administration. (B) Static posterior zoom image at 20 min. (C) Renography shows very rapid decline of renal radioactivity.

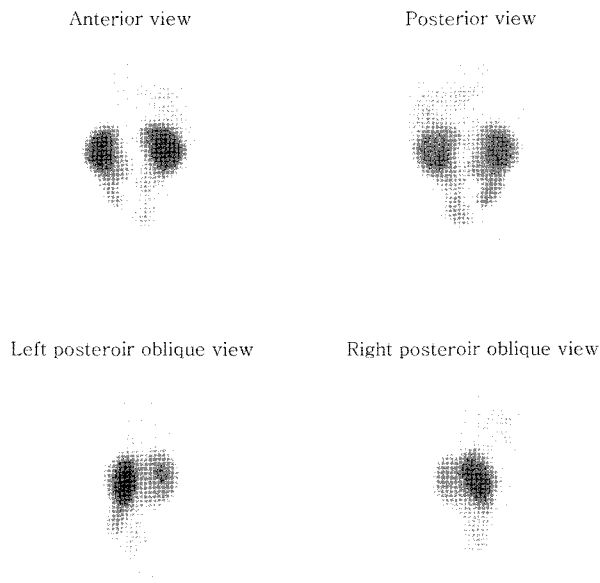


Fig 2. Tc-99m DMSA renal scan and renography show no remarkable photon defect in both renal cortices and visible tracer uptake in both megaureter areas.

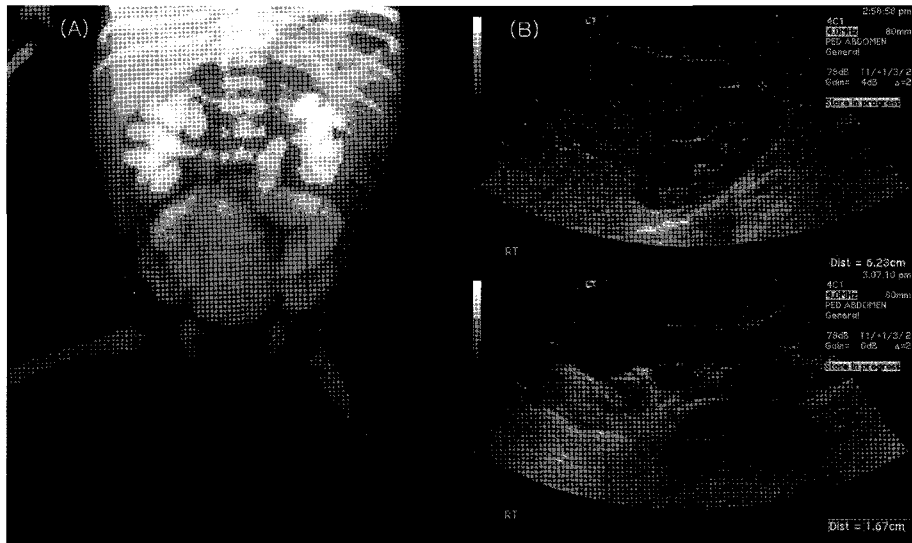


Fig 3. IVU and renal ultrasonography show dilated renal calyces with faceted contours and bullous dilatation of ureters, especially distal portion. There is no remarkable dilation of both renal pelvises.

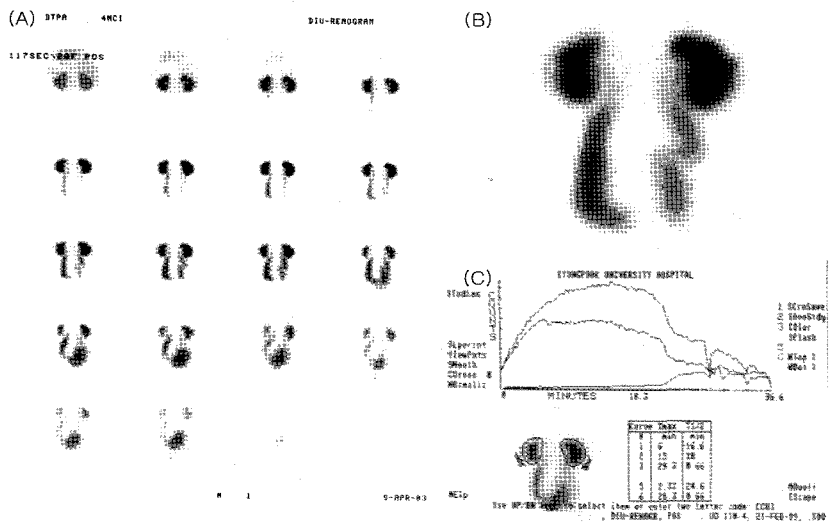


Fig. 4. Follow up Tc-99m DTPA renal scan and renography were performed at one year later. (A) Dynamic images (B) Static posterior zoom image at 20 min. (C) Renography show no significant change compare to the previous Tc-99m DTPA renal scan.

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