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Unilateral temporary functional stasis in the upper urinary tract caused by "a filled bladder" on Tc-99m DTPA diuresis renography: a teaching case

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A 2-year-old girl with recurrent urinary tract infection having slight left pelvicaliceal dilatation on her renal ultrasound underwent a Tc-99m DTPA diuresis renography. During the excretion phase, a prominent and persisting left pelvicaliceal stasis was noticed even after the diuretic injection. However, it disappeared simultaneously with an uncontrolled micturition. This patient is presented to show the effect of filled bladder on the physiological drainage of urine. Since urine flow in the urinary system is more complicated than simple drainage, a thorough understanding of the physiological basis for diuresis renography and the pitfalls of the technique is required for its appropriate use in the management of patients suspected of urinary tract obstruction.

Key words: bladder, diuresis renography, Tc-99m DTPA, urine flow