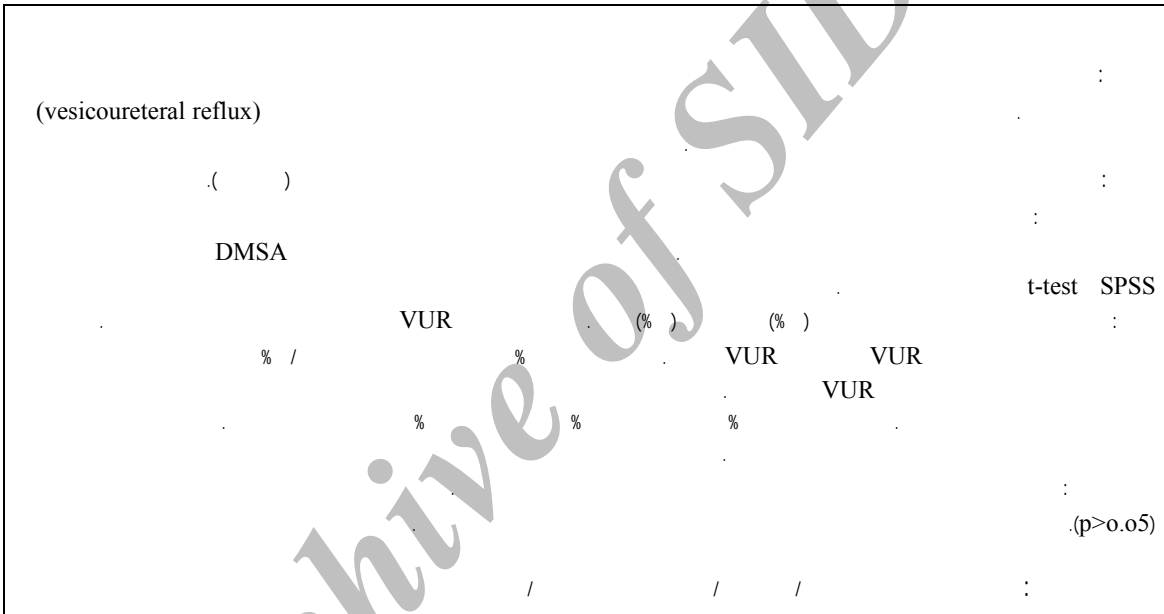


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# Evaluation of Renal Scar in Children with VUR and Urinary Tract Infection

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## Abstract

**Introduction:** Pyelonephritic scarring is the most common cause of Unilateral Renal Paranchymal Disease that ultimately could be terminated to hypertention, Renal Insufficiency and Chronic Renal Failure. Regarding to the importance of diagnosis and treatment of Urinary Tract Infection and VUR as risk factor for renal scar formation. This study was performed in according to probality of renal scar in patients with urinary tract infection.

**Objective:** Survey the Renal Scar in Children with VUR and Urinary Tract Infection in 17 Shahrivar Hospital in Rasht(2004-2006).

**Materials and Methods:** In this descriptive study all children with UTI and VUR who had referred or hospitalized in 17 shahrivar Clinic Hospital were selected. For evaluating Renal Scar, DMSA Scan was performed 4-6 months after the last UTI. The received findings were evaluated by SPSS soft ware and T.test.

**Results:** Of 128 patients, 106 cases were female and 22 patients were male of 33 patients with VUR 24 cases were female and 9 patients were male. Among 66 checked renal units, 42 units had VUR and 24 units had not Reflux. Renal Scar was observed in %64 units with VUR and %12.5 of renal units without VUR. In male patients 11 units and in Female's children 31 units had reflux. Renal scar was observed in upper pole (%47); middle pole (%22) and lower pole (%31). Renal Scar was observed in 11 units of the right kidney and 16 units of the left kidney.

**Conclusion:** The results of this study showed that male and age lower than 2 years old had higher risk for VUR and scar. There is no relationship between the age of children and Renal Scar ( $P>0.05$ ). According to these findings, evaluation and early diagnosis of VUR and Renal Scar and proper treatment are very important.

**Key words:** Children/ Cicatrix/ Urinary Tract Infections/ Vesico- Uretoral Reflux