Background: Many of the patients, who are evaluated by pediatric urologist because of urinary tract dysfunction, need urodynamic studies including urinary flow rate and bladder capacity for complimentary diagnosis. One of the most important problems in urodynamic evaluation of these patients is the nervousness and excitement of child while voiding in a strange style (western style) which causes unreliable results. Considering the above points, we decided to study and compare the uroflowmetry pattern and data of western style of voiding (the style which urodynamic devices are designed) with eastern style of voiding (The usual voiding style in eastern countries) and find the answer of this question that if there is any difference between these two styles or not.

Method: This research was a prospective cohort study in which the samples were selected from healthy preschool and school children and without any urologic diseases or complain or any other special important disease. The cluster sampling was from boys and girls of some kindergartens and schools. Then we selected 15 girls and 15 boys as studying population, whom after filling questionnaire, went under uroflowmetric measurement with eastern and western style of voiding. After above procedures, we compared and analyzed the gathered data by SPSS Ver 11.5.

Results and conclusion: According to the results there is considerable difference between uroflowmetry pattern of eastern style of voiding with western one especially in maximum flow rate, voiding volume and voiding time which can confirm the important role of child’s habits and usual voiding behaviors in his or her uroflowmetric pattern. Considering the special role of urodynamic studies in diagnosis, screening and follow up of the patients with dysfunctional voiding problems and the direct impact of reliability of the data on physicians’ clinical judgment, it is important to attend to the usual and familial style of voiding in describing the uroflowmetric data.

Conclusion: We should consider childs’ voiding habits in urodynamic studies interpretation.

Keywords: urinary flow rate, Bladder capacity, eastern style, western style, Normal urinary flow rate