

## **Is the Appearance of the Deflux Mound Predictive of Reflux Resolution?**

**Introduction and Objectives:** The results of endoscopic correction of vesicoureteral reflux have improved with the introduction of the double HIT technique. Some have advocated abandoning the postoperative VCUG based on the appearance of the mound and the absence of hydro-distention (HD) at the end of the procedure. We sought to evaluate the correlation of the appearance of the mound with the outcome based on a three month VCUG.

**Materials and Methods:** We created an online survey based on eleven primary vesicoureteral reflux cases (15 renal units, six failed and 8 successful procedures) selected randomly from our video library. An online survey questionnaire was emailed to 205 pediatric urology experts. Each survey question contained preoperative VCUG image as well as figures of the ureteral orifice before and after injection. Experts were asked to predict whether they thought that the Deflux mound appearance will be associated with a successful resolution of reflux at a 3 month postoperative VCUG. Percentage of correctly answered questions as well as sensitivity and specificity and predicting values of expert ability to predict outcome were analyzed.

**Results:** There were 104 Pediatric urologists who responded to the survey. Overall 66.4% of the experts were able to predict the resolution of reflux based on the appearance of the Deflux mound, (66% were able to correctly predict success and 67% correctly predicted failure). Mean outcome predictability per expert was 66% (range 26% to 86%). This test reach a sensitivity of 0.65, specificity of 0.67, positive predicting value of 0.74 and a negative predicting value of 0.57

**Conclusion:** The appearance of the Deflux mound and the lack of HD at the completion of the procedure is not a reliable predictor of outcome. Based on the above experience, postoperative VCUG is still required to truly determine reflux resolution.