

CYSTOURETHROSCOPY VERSUS CONTRAST STUDIES IN UROGENITAL SINUS AND CLOACAL ANOMALIES IN CHILDREN

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Aim of the study: Mapping of the accurate anatomy of the urogenital sinus and cloacal anomalies is essential prior to any surgical reconstruction. In this study, we compare the accuracy of the preoperative contrast study with preoperative cystourethroscopy in illustrating the abnormal anatomy in children.

Patients and methods: Fourteen children were included in this study that was conducted between January 2015 till now, 6 cases of cloacal anomalies, and 8 children with persistent urogenital sinus. All children had diverting colostomy beforehand, 10 cases with divided right transverse colostomy, whereas divided pelvic colostomy was the case in 4 cases. Age ranged from 5 and half months to 22 months (median 13 and half months). All children had standard sonogram using water soluble contrast (omnipaque ®) combined with distal colostogram. All children again had preoperative cystourethroscopy, using 9 F zero camera cystoscope, and results of both techniques regarding the site of confluence of urethra, vagina and or distal colon were reported and compared to the operative findings.

Results: In cloacal anomalies, 6 children, the combined contrast sinogram with distal colostogram was able to demonstrate the site of confluence in 4 children (66.6%), and in persistent urogenital sinus in 5 out of 8 children (62.5%), with overall accuracy of 9 cases out of 14 (64.3%). On the other hand, preoperative cystoscopy was able to demonstrate the location of the confluence site in all children with persistent urogenital siuns, while only in one case of cloacal anomaly, the vaginal end was not visualized, an overall accuracy of (92.8%). Cystourethroscopy diagnosed significantly more children that contrast study ($P<0.05$).

Conclusions: Cystourethroscopy in the current study was superior to contrast study in demonstrating the accurate abnormal anatomy. In addition, introduction of catheters through endoscopy can help in the operative reconstruction. Larger number of children are still needed.