

Photo Quiz

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A 6 Year-old Female Presenting with Recurrent Urinary Tract Infections

A 6 year -old girl was admitted because of pyelonephritis. She had a history of recurrent urinary tract infections (UTIs) and daytime wetting. Her urinary tract ultrasonography was shown normal kidneys, increased bladder wall thickening and volume of post voiding residual urine. In voiding cystoureterography there was no vesicoureteral reflux. Urodynamic study showed high pressure detrusor and low compliance. Due to some difficulty in passing urinary catheter during VCUG, the patient underwent cystoscopy.

What is your diagnosis?



Figure 1. Pre operation

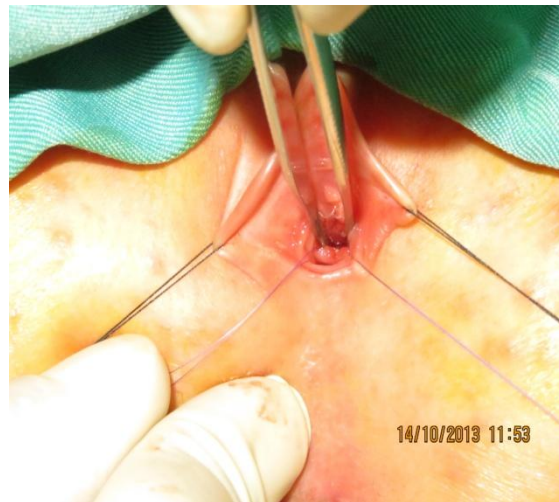


Figure 2. Post operation

Photo Quiz Answer

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The patient was taken to the operating room, and after adequate anesthesia was placed in the lithotomy position on the operating room table, her genital and perineal regions were prepped and draped in the usual sterile fashion. Pre operation feature of meatus is shown in figure 1. In girls there are three morphological kinds of congenital distal urethral stenoses and incomplete meatal stenosis are the most frequent of them. Lyon and Tanagho were the first to describe the concept of distal urethral stenosis in girls presenting with recurrent UTIs. Then they both doubted the obstructive nature of the distal stenosis of urethra and attributed the problems to sphincter spasm [1-3]. Anatomically this problem was caused by a thin membrane located at the meatus of the girls and the success rate after meatoplasty (figure 2) is more than 80% [4]. Girls presenting with meatal anomalies have more severe voiding and bladder dysfunction, as estimated by urodynamic study. It seems that there is an aetiological correlation between the functional voiding disorders and the meatal anomaly in girls [5]. A meatus deformity needs to be looked for in all girls presenting with voiding dysfunction and recurrent UTIs [6].

References

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