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## Correspondence

## Re: Functional urethral obstruction following tubularized incised plate repair of hypospadias by A. Hadidi (J Pediatr Surg (2013)48;1778–83)

To the Editor,

In his article Dr. Hadidi claims that a new complication, functional urethral obstruction, occurs in patients with “persistent obstructive symptoms” without anatomic obstruction. He casts a wide net to define this problem, including “dysuria and/or stranguria and/or increased bladder wall thickness, acquired reflux, and/or residual urine or recurrent fistulas” in patients he was able to calibrate with an 8Fr catheter.

He encountered this new condition frequently, in 129/263 (49%) of patients referred for complications after multiple failed repairs; at least one of which apparently was TIP. This group included some boys presenting with “difficult micturation” and a history of meatal dilations before his evaluation, whereas the majority had “dysuria and recurrent fistula”. Further details regarding these patients are needed so that readers could similarly make the diagnosis of FUO, but, were not provided – so we do not know how many had stranguria or a thick bladder wall or reflux or residual urine. Nor were these terms defined for readers to know what comprised a thick bladder wall, how reflux was determined to be acquired, and how much residual urine was considered evidence of obstruction. Was bladder ultrasound and/or PVR performed in all patients, and who had a VCUg? Finally, although two thirds of the patients had “recurrent fistula”, he does not inform us which prior procedures they had or if the fact the fistulas were recurrent is a key to the diagnosis. Should readers suspect FUO in every child with a fistula after TIP?

Most importantly, uroflowmetry was not done in toilet trained children to support a diagnosis of obstruction, and urethrography, which the author stated was the “objective investigation to diagnose FUO”, was only done in 14 patients. But the single example provided demonstrating FUO by urethrography was in a child with obvious glans dehiscence – not an intact narrow distal urethra suggested in the accompanying diagram – and the narrowed area is along the expected course of the 6Fr catheter used to inject the radiographic dye.

In summary, Dr. Hadidi discards all the usual objective tests to diagnose obstruction following hypospadias repair – calibration, uroflowmetry, urethrography, cystoscopy, and/or validated voiding questionnaires – to claim FUO based on a variety of subjective symptoms and/or findings that were never tabulated. His explanation that the neourethra is “recoiling” is unconvincing. Doesn’t the normal urethra expand and then reduce during voiding?

If the TIP neourethra causes FUO, then one would expect the obstruction to persist and possibly worsen with time. Yet others evaluating the neourethra with uroflowmetry have reported Qmax increases and the percentage of plateau curves decreases over time following TIP [1,2]. Interestingly, at least 2 reports found uroflow similar between TIP and the Mathieu repair that Dr. Hadidi prefers

[3,4]. So are Mathieu patients also at risk for FUO? In addition, if FUO exists then fistula repair leaving an obstructed distal neourethra intact would be expected to fail, but we reported 95% success with simple fistula closure following TIP [5].

While we have no doubt Dr. Hadidi has encountered patients with problems following TIP, readers cannot discern from his article how many actually had an intact but narrowed neourethra he considered obstructive. We previously reported meatal stenosis occurred in only 1 out of a total of 426 boys following distal TIP repair – a series in which TIP was the only repair used to correct distal hypospadias in consecutive children [6]. A systematic literature review found that the reported incidence of meatal stenosis after distal TIP was only 3% [7]. It is clear that the theoretical concern that urethral plate incision would scar and produce obstruction has rarely occurred. Regardless, drawing conclusions regarding healing after primary TIP derived from observations made in patients presenting with a mean of 2.4 failed operations as Dr. Hadidi does in this report is, at best, questionable.

These shortcomings in scientific reporting are not unique to Dr. Hadidi or to this article. However, that does not excuse the author, the reviewers, or the Editor for propagating them. A study claiming to describe a new complication, and one encountered often, should be expected to clearly define the signs and symptoms and means to diagnose it so that readers could identify similar patients in their practices. Furthermore, the assertion that TIP creates functional obstruction should have been weighed against the large volume of literature that does not report hordes of patients returning with anything resembling FUO as he describes it.

Sincerely,

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