

Letters to the Editor/Errata

Re: End Cutaneous Ureterostomy for the Management of Severe Hydronephrosis

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To the Editor. Although ureteral reimplantation of obstructed megaureters can be performed safely in infants,¹ many urologists still prefer to temporize bladder surgery until after age 1 year. Urinary diversion is necessary for this purpose.

Kitchens et al describe their experience with end cutaneous ureterostomy in 29 patients. Of these cases 15 with primary megaureters, including 2 bilateral cases and 1 with 2 megaureters in a single kidney, are the subject of our comments.

End cutaneous ureterostomy is a time-honored diversion method. Its effectiveness has never been questioned, and the series by Kitchens et al shows that, with current care standards, it is also safe. Of the 2 major concerns surrounding the technique, febrile urinary tract infections occur with an incidence of 1% per month of diversion, and stoma related complications are virtually absent for diversion periods shorter than 2 years.

Recently, we reported our experience with Double-J® stent insertion across the vesicoureteral junction as an alternative approach in these patients.² We were prompted to seek a method allowing internal rather than external urinary diversion by the parents of our patients, often unhappy with stomas that they considered cumbersome and unpleasant. These 2 contemporary series offer a nice chance for comparison between the alternative diversion methods (see table). Overall, both methods seem effective, and the morbidity is comparable. However, the numbers are so small as to make any definitive conclusion difficult to draw.

Nevertheless, we believe that there is at least a group of patients in whom internal diversion should be considered, ie those with bilateral ureteral obstruction or obstruction in a single kidney. In these patients internal diversion allows simultaneous preservation of bladder cycling. Kitchens et al

suggest the latter not to be a real issue unless the bladder itself is diseased. However, among 4 such cases in their series only 1 has been undiverted thus far. Hence, further experience is necessary before validating this assumption. Until then, we believe that in this specific setting internal diversion, via either insertion of a Double-J stent across the vesicoureteral junction or creation of a refluxing ureteral reimplantation as suggested by Lee et al,³ should be used.

Finally, future studies should also evaluate the effect of the initial diversion method on reimplantation. An approach including diversion via an end cutaneous ureterostomy (as well as via a refluxing ureteral reimplantation) and subsequent reimplantation requires double dissection of the ureter, which could make the second procedure troublesome and possibly jeopardize the terminal ureter. In this respect, while none of the patients in our small series showed reflux or obstruction after reimplantation, 4 of 12 patients undiverted by Kitchens et al presented with reflux. It is noteworthy that this finding corresponds to a failure rate that is 3 times higher than that reported by the same group for tapered ureteral reimplantation of primary obstructive megaureters (10%).⁴

Respectfully,

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	End Cutaneous Ureterostomy		Double-J Stent Insertion Across Vesicoureteral Junction	
No. primary megaureters	15		10	
Mos age at diversion (range)	3	(1.2–9.6)	3	(1–6)*
Mos age at reimplantation (range)	18	(12–31)	14	(13–27)*
No. surgical complications	0		1†	
No. febrile urinary tract infections (%)	6/15	(40)	2/10	(20)‡
No. tapered ureters (%)	4/13	(31)	0	

* Median.
† Obstruction of Double-J stent.
‡ Three additional patients presented with nonfebrile infections.