Commentary to "Outcome of severe hypospadias repair using three different techniques"

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What defines 'severe' hypospadias? The authors describe those having 'proximal division of the corpus spongiosum', but others might consider penoscrotal to perineal hypospadias the 'severe' cases, while another definition in this era of urethral plate-based urethroplasty might be those whose ventral curvature leads to plate transection. Less ambiguous terms are needed for surgeons to clearly communicate their experiences to each other. Consider the illustrations: few would disagree that the perineal hypospadias in Fig. 1 qualifies as a 'severe' case, but Fig. 2 appears to show a distal shaft meatus few would classify 'severe'. Discussion regarding 'hypoplastic tissues' and 'quality of the urethral plate' adds more subjective terms likely to be interpreted by readers differently. The problem is not unique to this report, nor to these authors, but for hypospadiology to progress we all must describe our patients and interventions as clearly as possible so that other surgeons can understand what is being done to whom.

Proximal shaft to perineal hypospadias frequently is associated with ventral curvature. We recently reported findings in 70 consecutive patients: 19% were straight after degloving, 31% underwent a single dorsal plication for curvature < 30° and the remaining 50% had curvature > 30° [1]. In contrast, the authors state that only 10% of their primary cases had ventral curvature that apparently was usually <30°, as most were corrected by dorsal plication. Again the question arises: how many of their patients had 'severe' hypospadias?

The authors prefer the onlay preputial flap repair. A common step in this technique is 'cutting back' a 'thin' distal urethral segment between divergent limbs of corpus spongiosum to the point where the spongiosum is intact [2]. However, definition of 'thin' also varies among surgeons, and those who perform alternative urethroplasties find it necessary to cut back few such cases. For example, we summarized our experience in 91 consecutive patients with midshaft to perineal hypospadias of whom 14% initially had a distal meatus, such as the one in Fig. 2, cut back to the mid or proximal shaft before urethroplasty, while another 368 patients with similar distal hypospadias did not [3].

Despite these criticisms, the article tabulates outcomes from an experienced surgeon using onlay and Koyanagi flaps. Complication rates of 27% and 61.5%, respectively, for primary repairs are similar to those reported by other experienced surgeons. Meanwhile, technical modifications have reduced complication rates in proximal TIP, currently to the same range as after distal repairs [4,5]. No one knows the best option for proximal hypospadias repair, but after more than 20 years' experience with modern flap procedures should hypospadiologists be discouraged that so many patients still need additional surgery?

Finally, a comment is warranted on hormone use in hypospadias repair. To date, no randomized trial describes the impact of preoperative stimulation on urethroplasty outcomes despite a documented increase in glans circumference. As the authors note, the complications seen in patients selected for hormonal therapy may simply indicate a subgroup more likely to have complications. While they speculate that androgens might impair healing, it is also
possible complications would have been higher without stimulation. Without a randomized trial involving similar patients this question will remain answered.

References


