



Letter to the Editor

Re. “Pre-incision urethral plate width does not impact short-term tubularized incised plate urethroplasty outcomes”



I write to comment on the paper by Bush and Snodgrass [1]. The authors describe “an urethral plate incision made deeply up to the corpora” on the glans penis, instead of having a wide (>8 mm) urethral plate, to avoid urethroplasty complications. Although the authors’ definition of the ventral glanular surface as “urethral plate” is the subject of another discussion, I would like to refer the readers to the normal anatomy of the penis, in particular the “fossa navicularis.” The male urethra is NOT a tubular structure with uniform configuration and diameter, and has distinct attachments in glans penis with the “fossa navicularis.” The glans wings merge in the midline ventrally, but are separated by the “septum glandis” in conjunction with the “frenulum.” The frenulum is also included in the formation of the distal (glanular and subcoronal) urethra [2–4]. Recently, we documented the anatomical features of the glans penis with MRI study. In accordance with previous historical drawings of the glans penis, our findings revealed that a fibrous tissue (septum glandis) covers the glanular urethra (fossa navicularis) circumferentially. It binds the fossa navicularis to the frenulum and corpus cavernosum, as a suspensory ligament on the midline [5].

In hypospadias surgery, tubularization of the neourethra over a catheter or stent and approximation of the dissected glans wings on the midline to enclose the neourethra have been the standard surgical method for decades. Attempts with a deep glanular incision on the midline aim to have a wide glanular groove, which correlates with the fossa navicularis. In fact, a glanular incision never provides a fossa (navicularis), no matter how deep it is created. The glanular urethra should be supported by loose connective tissue (septum and frenulum) ventrally, as in the normal penis anatomy. One way to achieve a fossa within the glans is to (re)create a neo-septum and a neo-frenulum ventrally, forming a frenular triangle or delta between the glans

wings, which allows tension-free tubularization. The glanular urethra should not be covered (compounded) by the glans wings over its full length. We described a new technique (Glanular-Frenular Collar technique) that simulates the development of the glanular and subcoronal urethra, which can be incorporated into the repair of all cases of hypospadias [6]. One important point of GFC repair is to provide connective tissue (dartos) between the glans wings, which has an adhesive function and limits glans dehiscence without glans wings’ dissection. Our technique is in complete opposition to the well-known TIPU technique performed with extensive dissection of the glans wings.

In the article by Bush and Snodgrass [1], all the parameters regarding the glans width rely on its widest or narrowest point, and the incision made on the glans penis is irrelevant to formation of a “fossa navicularis” in hypospadias repair. Subjective descriptions of subjective technical steps by the authors undermine the proven facts about anatomy. We should revisit the anatomy to make appropriate discussions on the hypospadias-repair surgical techniques.

References

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