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## LETTER TO THE EDITOR

Operational Andrology

# Re: Commentary on “Spongiosum-combined glanuloplasty reduces glans complications after proximal hypospadias repair”

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Dear Editor,

We are happy to have our paper get the attention of Dr. Özbey and Dr. Anand. We read their comment<sup>1</sup> to our article attentively which raised concerns on our description of novel procedure of spongiosum-combined glanuloplasty.

We developed this procedure around 2014, and designed clinical observation from 2015 to 2016 to compare it with our former glanuloplasty in hypospadias repair. Hypospadias is a penile ventral lesion in an inverted triangle area, with the division of spongiosum as the top point, the front of glans penis as the lower edge, and dysplastic corpus spongiosum as the two lateral sides; the tissue in this area is dysplastic. Not only the urethra and corpus spongiosum, but also the foreskin, the superficial fascia and the frenulum, are all not developed. This area is the site with high complications rate like fistula and glans dehiscence. Hence, we designed to divide the dysplastic corpus spongiosum on the top bifurcate point from the proximal normal spongiosum, but keep the distal spongiosum attached to the glanular tissue. After that, we mobilized these two spongiosa with alongside Buck's fascia together on the surface of tunica albuginea toward the bottom of glans penis. This maneuver with urethral plate dividing could further straighten penis in proximal hypospadias and increase the tissue amount of the glans and coronal sulcus.

In our study, we focused on proximal hypospadias with small glans.<sup>2</sup> We used dorsal inner prepuce island flap to build the urethra, so we have to separate the glans wings widely to accommodate neourethra. We approximated bilateral glans wing in the midline from the glans outermost convexities to the proximal end of neomeatus, and the length is about 2 mm. Proximal to outermost convexities, we think it is the area called by Dr. Özbey as the cleft-like area between the split wings of the glans penis, but we call it as ventral coronal sulcus. In this area, the spongiosum was approximated in midline just covering new urethra and decrease the incidences of fistula and glans dehiscence. We surprisingly realize both our glanuloplasty and Dr. Özbey's

glanular-frenular collar (GFC) procedure use the distal dysplastic spongiosum to fill the same area.<sup>3</sup> Since the hypospadias in our paper was proximal and with small penis and glans, we agree with Dr. Özbey that some small glans dehiscence may be hidden. While the patients in Dr. Özbey's study were distal hypospadias with well-developed glans, and were repaired by tubularized incised plate (TIP) method, the glans wings could not need to be mobilized.

Concerned with the sense of the frenulum, we noticed the intact frenular triangle is innervated by both dorsal nerve of penis and ventral perineal nerve.<sup>4</sup> However, as we all know, the frenular triangle is not presented in hypospadias, and its reconstruction needs inner prepuce which is innervated by the dorsal nerve which runs along the surface of the dorsal penis. Hypospadias repair does not touch this area. Nevertheless, we will keep eyes on long-term results, including sexual satisfaction of these patients in the future.

## AUTHOR CONTRIBUTIONS

Both authors have drafted this manuscript and approved the final manuscript.

## COMPETING INTERESTS

Both authors declare no competing interests.

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