

Commentary to 'Role of urethral bulking agents in epispadias/exstrophy complex patients'



Patricio C. Gargollo ^{a,b,*}

^a*Pediatric Urology, Minimally Invasive and Robotic Surgery, Children's Medical Center Dallas, USA*

^b*Pediatric Urology, UT Southwestern Medical School, USA*

The authors should be congratulated on their meticulous record keeping of what is, without a doubt, a very complex group of patients who present the added challenge of multiple surgical procedures and the need for chronic urologic care. Although the topic presented and the questions asked are of interest to any provider who cares for these patients, the shortcomings in the study design make it impossible to reach any certain conclusions regarding the role of urethral bulking agents in these patients. There are obviously multiple problems that can be ascribed to the retrospective nature of this study, and the authors candidly review some of these in the discussion. They also, however, fail to reconcile the inclusion of patients with different diagnoses treated without a standard protocol, using different injection techniques with different bulking agents. These limitations, in my view, invalidate their conclusions and there is no amount of written justification that they can provide that changes these errors in study methodology. The fact that the authors include patients injected with collagen, dextranomer–hyaluronic acid, autologous fat, and silicone for example adds to the confounders in the study and further questions the utility of the data presented in supporting the conclusions. It is known that the success, for example, of collagen compared with dextranomer–hyaluronic acid in the treatment of vesicoureteral reflux is inferior [1]. Although the validity of the methods and conclusions in that study may be questioned, the issue remains that the authors are comparing potentially very different injectable agents with uncertain absorption and durability characteristics. The authors state that "It has been well reported that there is no difference in efficacy

between types of bulking agents" and then cite a review article on primarily female stress incontinence [2]. I would, in fact, argue that there is no published evidence that supports that bulking agents are equivalent in their efficacy to treat incontinence in any patient population and thus cannot all be grouped together as the authors have done [3].

Again, the authors should be commended in reporting their series of urethral bulking agent injection in this patient population but the only thing that they can state with certainty given their lack of a standardized protocol, the retrospective nature of their review, the multiple confounders and sources of bias, the small sample size, and the lack of a control group is that urethral bulking agents may or may not have a role in improving continence or affecting bladder capacity in patients with epispadias, bladder exstrophy, or cloacal exstrophy. Unfortunately, any other conclusion cannot be supported with the data presented.

References

- [1] Escala Aguirre JM, Cadena González Y, Retamal Pinto G, López Egaña PJ, Letelier Cancino N, Zubieta Acuña R. Endoscopic treatment of vesicoureteral reflux (VUR). Comparison of various substances. Long-term results. *Arch Esp Urol* 2008;**61**: 297–300.
- [2] Kotb AF, Campeau L, Corcos J. Urethral bulking agents: techniques and outcomes. *Curr Urol Rep* 2009;**10**:396–400.
- [3] Kirchin V, Page T, Keegan PR, Atiemo K, Cody JD, McClinton S. Urethral injection therapy for urinary incontinence in women. *Cochrane Database Syst Rev* 2012;**2**:CD003881.

* Pediatric Urology, Minimally Invasive and Robotic Surgery, Children's Medical Center Dallas, USA. Tel.: +1 214 456 9505; fax: +1 214 456 2497.

E-mail address: patricia.gargollo@childrens.com

© 2013 Published by Elsevier Ltd on behalf of Journal of Pediatric Urology Company.

<http://dx.doi.org/10.1016/j.jpuro.2013.09.006>