Title
Editorial Comment.

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EDITORIAL COMMENTS

Grimes et al from Iowa examined the histopathology of USD treated with urethroplasty. Specifically slides from historical cases were rereviewed to examine for features of LS and rated for inflammation severity. Rereview yielded substantial differences in pathology reports. Nearly half of the specimens had evidence of chronic inflammation. Men with inflammatory strictures reported worse health, although their PROMs and surgical outcome measures were similar across groups. While LS USD is associated with systemic inflammatory conditions,[1] it is interesting to see inflammation involved in nonLS USD. One wonders how inflammation varies across the life span of a stricture. Is spongiosum tissue away from the stricture inflamed, too? Is inflammation present in the spongiosum in people with metabolic syndrome without USD? Can our interventions be crafted to exploit the role of inflammation somehow?

The study indicates multiple common and diverging paths of why USD forms. We understand way too little about USD pathophysiology. At present we are stuck treating the end result, leaving no room for prevention or less invasive treatments. This work examining USD histopathology to further our understanding of pathophysiology is a start. Unraveling the molecular and microbiome contents of USD is needed, too. Taken together, if we learn why USD forms, we have a clearer path toward novel and innovative treatments, and progress in our field.

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1. Blaschko SD, Gaither TW, Alwaal A et al: Lichen sclerosus comorbidities and complications from a national sample of patients treated with urethroplasty. Urol Prac 2015; **6:** 329.

This report is an intriguing histopathological analysis of urethral stricture specimens obtained during anterior urethroplasty. A key finding is that 41% of urethroplasty specimens exhibit moderate or severe inflammation. While one might expect this to be true for strictures associated with lichen sclerosus (a known chronic inflammatory process), moderate and/or severe inflammation was found across most etiologies, including idiopathic, iatrogenic, traumatic and hypospadias related strictures. Idiopathic strictures, which represent the most common cause of urethral stricture worldwide, represent an area of particular intrigue.[1]

Given that most strictures have no readily identifiable cause but show chronic inflammation, it behooves us to contemplate the potential role of systemic, vascular and autoimmune factors in patients with urethral stricture. For example, the corpus spongiosum is a vascular structure. Thus, it is entirely possible that urethral stricture pathogenesis may be related to (or a precursor of) systemic vasculopathy in a manner similar to the association between erectile dysfunction and vascular disease. Recent evidence also suggests an association between testosterone deficiency and urethral stricture, which may further implicate systemic disease processes, given the known association between low testosterone and vascular disease.[2,3] Lastly, autoimmune and connective tissue disorders, and their association with urethral stricture are not well understood and have yet to be examined in any meaningful way. While the authors of this