



Open Access

## INVITED COMMENTARY

Male Fertility

### The importance of sexual function in men with spinal cord injuries

Jason R Kovac<sup>1</sup>, Larry I Lipshultz<sup>2</sup>

*Asian Journal of Andrology* (2016) 18, 391; doi: 10.4103/1008-682X.179247; published online: 5 April 2016

Spinal cord injuries (SCIs) are often devastating to patients and their families. In those men young enough to consider families and unfortunate enough to be unable to ejaculate, multiple options exist. The attached manuscript by Dr. Ibrahim *et al.*<sup>1</sup> contains a detailed outline of a multitude of techniques available to the Andrologist to both evoke ejaculation and harvest sperm from these patients. The authors, pioneers in the field of male fertility research for SCI patients, detail very high success rates for penile vibratory stimulation (86% success if above T10, 15% if below) and electroejaculation (91.9% success).

It is important when assessing male fertility patients with SCI that a detailed sexual history is obtained with a specific focus on whether patients can obtain erections. Information regarding the medications and interventions previously utilized is also beneficial. Some patients have simply never been presented with any options to treat their erectile dysfunction (ED). As such, identification and correction of this simple oversight could promote fertility without the need for any additional interventions.

Sildenafil has been proven to be a valuable and safe medication in the management of ED in male SCI patients that is simple to administer and monitor.<sup>2</sup> Absence of both psychogenic and reflexive erections will preclude successful treatments with PDE5 inhibitors.<sup>2</sup> In those patients, intracavernosal injection (ICI) provides a reliable and safe

alternative.<sup>3</sup> Caution is required since men with SCI typically require significantly lower doses of ICI than healthy men, and the hypotensive effects of the medications need to be considered. Other options include intra-urethral prostaglandin, vacuum erection devices and implantable penile prostheses.<sup>4</sup>

A second issue that should also be discussed with male SCI patients is libido. While research has suggested that the SCI affects sexual behavior with regards to performance and body sensitivity,<sup>5</sup> chronic pain treated with opioids<sup>6</sup> may also affect libido through a testosterone ablative mechanism.<sup>7</sup> As such, following confirmation of low levels of libido on history, an analysis of a patients serum hormones including testosterone could prove insightful. Restoration of these endocrine deficiencies may then restore the desire for sexual functioning.

#### REFERENCES

- 1 Ibrahim E, Brackett NL, Lynne CM. Advances in the management of infertility in men with spinal cord injury. *Asian J Androl* 2016; 18: 382–90. [Doi: 10.4103/1008-682X.178851] [Epub ahead of print].
- 2 Schmid DM, Schurch B, Hauri D. Sildenafil in the treatment of sexual dysfunction in spinal cord-injured male patients. *Eur Urol* 2000; 38: 184–93.
- 3 Kapoor VK, Chahal AS, Jyoti SP, Mundkur YJ, Kotwal SV, *et al.* Intracavernous papaverine for impotence in spinal cord injured patients. *Paraplegia* 1993; 31: 675–7.
- 4 Linsenmeyer TA. Treatment of erectile dysfunction following spinal cord injury. *Curr Urol Rep* 2009; 10: 478–84.
- 5 Cardoso FL, Savall AC, Mendes AK. Self-awareness of the male sexual response after spinal cord injury. *Int J Rehabil Res* 2009; 32: 294–300.
- 6 Cardenas DD, Jensen MP. Treatments for chronic pain in persons with spinal cord injury: a survey study. *J Spinal Cord Med* 2006; 29: 109–17.
- 7 Smith HS, Elliott JA. Opioid-induced androgen deficiency (OPIAD). *Pain Physician* 2012; 15: ES145–56.

<sup>1</sup>Men's Health Center, 8240 Naab Road, Suite 220, Indianapolis, Indiana 46260, USA; <sup>2</sup>Scott Department of Urology, Baylor College of Medicine, Houston, Texas 77030, USA.

Correspondence: Dr. JR Kovac (jkovac@urologyin.com)