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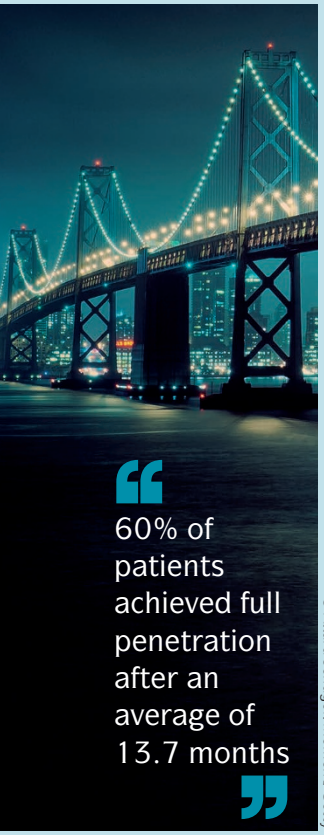

60% of patients achieved full penetration after an average of 13.7 months

SURGERY

Bridging the gap: neurorrhaphy for postprostatectomy ED

A novel penile reinnervation technique using sural nerve grafts to bridge the femoral nerve and the dorsal penile nerve and corpus cavernosum has been described in *BJU International*.

Researchers in Brazil tested the technique in ten men with postprostatectomy erectile dysfunction. All were aged between 40 and 70 years and had undergone prostatectomy at least 2 years previously, with normal sexual function before their surgery but no subsequent sexual intercourse.

Baseline physical examination, International Index of Erectile Function (IIEF) and pharmacopenile Doppler ultrasonography were performed before the surgery and men were then assessed at 6, 12, and 18 months. They were also evaluated with a clinical evolution of erectile function (CEEF) questionnaire after 36 months, which enables assessment of changes in erectile function over time.

Sural nerve grafts were harvested from both limbs and each was halved to provide four lengths. Bilateral sural nerve grafts were sutured to the femoral nerve, two on each side. One nerve was then introduced into the corpus cavernosum for direct innervation and one was sutured to the lateral face of the dorsal nerve of the penis. The procedure was then repeated on the contralateral side.

After surgery, CEEF assessment showed that nocturnal erections and penile engorgement commenced at a mean of 2.7 months after surgery. The onset of rigid erections occurred on average after 9.9 months and, overall, 60% of patients achieved full penetration after an average of 13.7 months and 40% reported partial erection. A significant improvement was noted in IIEF between baseline and 12 and 18 months, and general satisfaction improved between baseline and all time points.

Late reinnervation using this surgical technique could be an alternative to the current approach of reinnervating at the time of prostatectomy, which lengthens operative time and is often ineffective. Using the femoral nerve, which — like the (damaged) cavernous nerves —releases acetylcholine, closely replicates the innervation that has been lost. Furthermore, the femoral nerve's proximity to the base of the penis and the fact that it contains motor and sensory fibres make it an ideal choice.

This novel technique seems to be viable, safe, and effective, although larger trials will be required to confirm the results.

Annette Fenner

ORIGINAL ARTICLE Souza Trindade, J. C. *et al.* Long-term follow-up for treatment of erectile dysfunction post-radical prostatectomy using nerve grafts and end-to-side somatic-autonomic neurorraphy: a new technique. *BJU Int.* http://dx.doi.org/10.1111/bju.13772 (2017)

FURTHER READING Weyne, E. *et al.* Landmarks in erectile function recovery after radical prostatectomy. *Nat. Rev. Urol.* **12**, 289–297 (2015)