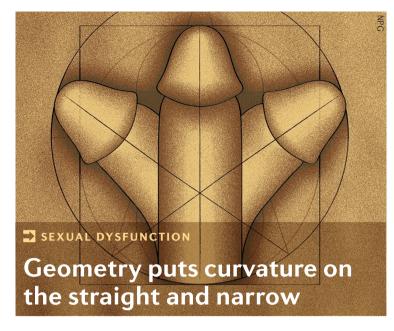
RESEARCH HIGHLIGHTS

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A modified corporoplasty technique using principles of geometry has been shown to improve both congenital and acquired penile curvature, according to a paper published in the International Journal of Impotence Research.

Penile curvature <60°, commonly caused by congenital abnormalities or as a result of Peyronie's disease, is often corrected using the Nesbit procedure, which shortens the convex side of the penis. More substantial curvature requires correction using plaque incision (for Peyronie's) or partial excision and grafting. In their recent paper, Vicini and colleagues describe a new technique, which uses geometry to determine the exact site for incision and the exact amount of tunica to be overlaid, in order to optimize the surgery and produce perfect penile straightening.

The procedure was carried out on 74 men, all of whom had congenital or acquired penile curvature of >60° but with satisfactory erectile function. Preoperative assessment included physical examination, photography, prostaglandin E1 induction of erection followed by Doppler ultrasonography to evaluate erectile function, and International Index of Erectile Function (IIEF) questionnaire. After degloving of the penis, geometric principles were used to determine the exact placement of the incision. First, two lines were drawn tangentially to the penile axis during erection. Then, from the point of maximum curvature, a circumferential line was drawn at the bisection of the two tangential lines. Two lines perpendicular to the penile axis were then drawn on the first straight segments outside of the areas of curvature, enabling the surgeons to determine the exact areas of tunica albuginea that needed to be plicated to correct the curvature. The amount of tunical tissue required for overlaying was determined by subtracting the length of the concave from that of the convex sides.

Patients were followed up at 12 weeks, 12 months and 24 months after surgery, at which points no major complications were reported. All patients were discharged on postoperative day 1, with normal sexual function resumed after 6-8 weeks. 100% of patients demonstrated correction of the curve, with no significant relapse (curvature >15°) reported at 24 months. Although 74% of men reported penile shortening, 92% of patients reported a high level of satisfaction with their sex life. The easily reproducible geometric basis of the technique means it can be easily applied to other centres and used in multicentre studies.

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ORIGINAL ARTICLE Vicini, P. et al. Geometrical modified nesbit corporoplasty to correct different types of penile curvature: description of the surgical procedure based on geometrical principles and long-term results. Int. J. Impot. Res. http://dx.doi.org/10.1038/ijir.2016.28 (2016)