Peyronie’s disease is characterized by a fibrous inelastic scar of the tunica albuginea that often results in a penile deformity. Peyronie’s disease may present as difficulty with penetration, or penetration that causes discomfort to the partner. Men with <12 months disease, progressive deformity, or painful erections may be considered candidates for non-surgical therapy, although there is limited evidence of benefit with respect to deformity reduction. Non-surgical therapies include vitamin E, colchicine, pentoxifylline, traction therapy, and vacuum therapy as well as intralesional injection with verapamil or interferon. Surgery is an option in specific instances.
Surgical reconstruction is indicated for disease that is: stable for more than 6 months, with erect deformity that is painless, a compromised ability to engage in coitus secondary to deformity and/or inadequate rigidity, and when there is extensive plaque calcification. The partial plaque excision and grafting (PEG) procedure starts with the preoperative erection deformity angle measured. A circumferential degloving skin incision is fashioned, followed by longitudinal opening of Buck’s fascia. The neurovascular bundle is elevated if the plaque involves the dorsal and/or lateral surface. The PEG surgical technique involves a single partial excision of the Peyronie’s plaque centered over the area of maximum penile curvature and/or indentation, typically carried out to the 3 and 9 o’clock positions on the shaft bilaterally. With the penis on full stretch, stay sutures are placed at the four corners of the defect using 4–0 polydioxanone. The corners may be extended radially to enhance girth correction. The lateral longitudinal aspects of the defect should be equivalent, ultimately forming a rectangular defect.
FIGURE 3

The stay sutures are used to stretch the defect and ensure accurate measurement, usually ranging from 2–5 cm longitudinally and 4–7 cm transversely. Tutoplast (Coloplast, Minneapolis, MN, USA) Processed Human Pericardium is carefully sized to the defect. As this graft does not contract, only add 3–4 mm to the measured defect size in both length and width. The graft is then secured to the corners of the defect and to the tunical edges using running 4-0 polydioxanone sutures, taking care to suture from the tunica to the graft.
Buck’s fascia is closed with a running 4–0 chromic suture, and the penile skin incision is closed with interrupted 4–0 chromic sutures in a horizontal mattress fashion. The postoperative erectile angle is measured. If residual curvature warrants correction, tunica plication is recommended. Postoperative rehabilitation includes massage, manual stretch therapy, phosphodiesterase type 5 (PDE5) inhibitor therapy, and daily penile traction therapy is recommended to begin 2–4 weeks postoperatively for 3 months.