Surgical therapy of Peyronie's disease by partial plaque excision and grafting with collagen fleece: feasibility study of a new technique.

Surgery is gold-standard for correction of Peyronie's curvature. Grafting is preferred in advanced deviations. We present our novel surgical technique and early results of grafting with collagen fleece. Patients with stable Peyronie's disease (PD) were included. Grafting was performed by a ready-to-use collagen fleece coated with tissue sealant (TachoSil, Nycomed, Konstanz, Germany), following partial plaque excision/incision. Results of correction were documented by artificial erection. In all, n=70 consecutive patients underwent surgery. Mean patient age was 56.4 years (range: 33-72); 88.6% of patients had dorsal deviation, 11.4% lateral or ventral deviation. Grafting after partial plaque excision was performed in 61 patients (87.1%), after plaque incision in 2 (2.9%) patients. In the former patients, mean operative time was 94.2 min (range: 65-165). Totally straightness was achieved in 83.6%. Three patients required surgical drainage because of subcutaneous haematoma formation. After mean early follow-up of 5.2 days (range: 2-15), glans sensation was normal in 56 patients (91.8%). Seven patients (10.0%) underwent Nesbit procedure alone. Grafting by collagen fleece in PD is feasible and promising. Major advantages are decreased operative times and easy application. Moreover, an additional haemostatic effect is provided. However, long-term clinical outcomes are necessary to confirm these encouraging findings.