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Lipofilling of Perineal and Vaginal Scars: A New Method for Improvement of Pain after Episiotomy and Perineal Laceration

Sir:

Chronic pain after episiotomy caused by scar contracture or neuroma formation remains a serious problem.[1] The therapy of choice can be simple resection of the scar tissue with primary wound closure or local flaps. Recovery after these corrections may take time, with the risk of receiving no improvement, more pain, or poor cosmetic results.

We have performed a prospective study with assessment of perineal/vaginal pain and sexual functioning before and after autologous free fat transplantation for correction of scars following childbirth in 20 patients (mean age, 34 ± 7.5 years; mean time after episiotomy, 10.3 ± 2.3 months). Mediolateral episiotomy had been performed in 18 patients. Two patients had pain after perineal laceration. Three patients have had correction of the scars with primary excision and no signs of improvement 6 months ago. All patients reported dyspareunia and other pain-related problems. Lipofilling was performed according to the Coleman technique,[2] with scar release and implantation into parallel tunnels on multiple layers under the scars (Fig. 1). A special technique of infiltration with one finger in the vagina and another in the rectum was used to avoid injury of the rectum in case of lipofilling of scars of the posterior wall of the vagina. Perineal pain was assessed preoperatively and at different time points after lipofilling using the short-form McGill Pain Questionnaire, including the Present Pain Intensity index and a visual analogue scale.[3] Sexual functioning was assessed with a revised Sabbatsberg Sexual Self-Rating Scale before and after intervention.[4] Follow-up of the patients was scheduled after 1, 3, and 6 months. The distribution of variables within the patient group was compared by nonparametric analysis of variance (two-sample Wilcoxon test), and differences between dependent (paired) data were assessed by the nonparametric paired test (signed rank test). A value of $p < 0.05$ was considered to be statistically significant. An average volume of 12 ± 3 cc of autologous fat was injected (range, 7 to 15 cc). Four patients underwent two lipofilling sessions because of improvement with the first lipofilling but had remaining painful areas in one part of the scar. The average interval between these sessions was 4 ± 1.5 months. All patients made good postoperative recovery without major complications. Eighteen of 20 patients had an immediate subjective improvement of their pain obviously attributable to release of severe scar contractures. One month after lipofilling, the short-form McGill Pain Questionnaire score was significantly reduced in comparison with the score before treatment ($p < 0.05$) (Fig. 2). Three and 6 months after treatment, the score had decreased further ($p < 0.05$). The Present Pain Intensity index and visual analogue scale score were also significantly reduced after 1, 3, and 6 months ($p < 0.05$). The Sabbatsberg Sexual Self-Rating Scale score showed a significant increase after lipofilling ($p < 0.05$). Fifteen patients were very satisfied with the small operation and five were satisfied.

Fig. 1. Release of scar tissue combined with fat injection 8 months after mediolateral episiotomy in a 28-year-old patient with dyspareunia.

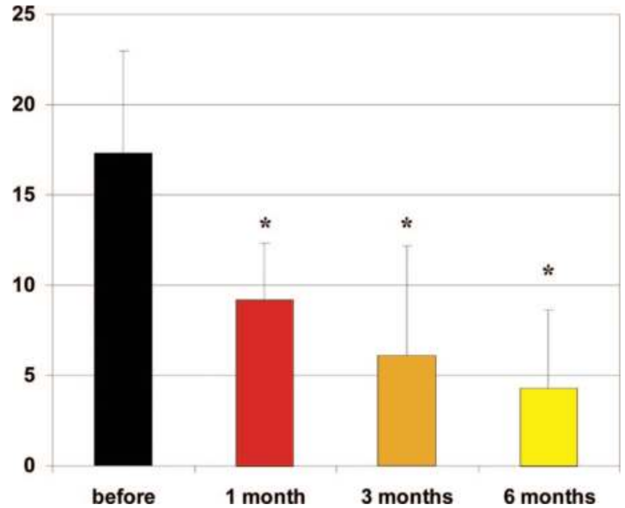

Fig. 2. Short-form McGill Pain Questionnaire scores before and 1, 3, and 6 months after lipofilling in patients with episiotomy and perineal laceration (*$p < 0.05$ versus before).

A number of studies recently demonstrated the reliability, long-term stability, and safety of autologous free fat transplantation in reconstructive procedures.[5] In our opinion, lipofilling also seems to be a promising treatment for correction of perineal/vaginal scars after episiotomy and perineal laceration. It is well tolerated

and offers encouraging results, with improvement of pain and better sexual function.
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DISCLOSURE

The authors have no financial interest in this research project or in any of the techniques or equipment used in the study. The authors have no conflicts of interest to disclose.

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Nearly Circumferential Pharyngoesophagectomy Reconstruction with a Double–Skin Paddle Anteromedial Thigh and Sartorius Muscle Free Flap

Sir:

The versatility and reliability of the anterolateral thigh flap has made it an essential tool for the reconstructive head and neck surgeon. At our institution, the anterolateral thigh donor site is the preferred free flap for pharyngoesophageal reconstruction because of its excellent functional outcomes and low rate of fistula and stricture formation.[1] In the senior author's experience of 250 anterolateral thigh flaps; however, 4.3 percent of thighs had no perforators in the anterolateral thigh flap territory.[2] The anteromedial thigh free flap is a viable alternative for soft-tissue coverage in head and neck reconstruction.[3]

We present a 67-year-old man with the recent diagnosis of a nearly obstructing T3N2M0 squamous cell carcinoma of the larynx that required emergent tracheostomy. The patient's medical history included myocardial infarction, congestive heart failure (ejection fraction, 28 percent), severe atherosclerosis with carotid stenosis following endarterectomy, emphysema, peripheral vascular disease, and severe malnutrition with a body mass index of 15. Tumor ablation resulted in bilateral neck dissection, a nearly circumferential defect of the hypopharynx, a cervical esophagus 9 cm in length, and part of the base of tongue, and a lower neck skin defect. Note that we prefer to incorporate a posterior strip of the pharynx, 2 cm in this case, into a reconstruction when available to help prevent stricture formation.[2] A standard anterolateral thigh flap was designed and the thigh explored; however, only an extremely small insufficient perforator B was present. Further exploration of the medial thigh demonstrated two large-caliber (>1 mm) musculocutaneous perforators, B and C, through the sartorius muscle. This perforator was traced back to its main vessel, which originated from the

Fig. 1. A 7 × 15-cm anteromedial thigh free flap with vascularized fascia and a 10-cm section of sartorius muscle supplied by the rectus femoris branch of the lateral circumflex femoral system.