

cent). Another study of 562 patients reported that 8 percent experienced a residual or recurrent deformity. Infection, keloids, hemorrhage, and necrosis of the anterior skin occurred less frequently. In addition, a study of 31 patients who were observed carefully over a period of 1 year after surgery showed that 33 percent have some postoperative recurrence. As a result, excessive correction of the deformity at the time of the initial procedure is advocated by some surgeons.^{2,3}

After re-reviewing our core references and Dr. Peled's 1995 treatise,⁴ we are even more convinced that our suggested technique would give more natural, longer-lasting, and more predictable results. We feel this is because with our method we have more control; we have gentler tissue handling to minimize scarring, devitalized tissue, and infection; we release the skin overlying the cartilage in the classic fashion to eliminate memory and lessen the chance of recurrent deformity; and the scoring is not through-and-through (as a needle punch), yielding a natural, curved shape as opposed to a sharp edge from a complete break along needle lines.

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MASSIVE PREPATELLAR BURSA: A CASE OF NATURAL TISSUE EXPANSION: ANATOMIC AND HISTOLOGIC IMPLICATIONS

Sir:

Tissue expansion is a phenomenon whereby skin, mucosa, nerves, and muscles progressively expand over an underlying enlarging space-occupying lesion.^{1,2} We present a case of massive, long-standing prepatellar bursa, which acted as a physiological tissue expander—the longest standing reported case of tissue expansion—and we discuss the long-term anatomic and histologic implications.

A 47-year-old male carpet layer presented with a massive prepatellar bursa on his left knee (Fig. 1), approximately 15 cm in diameter, which he had been carrying for more than 20 years. The surgical specimen was 14 × 12 × 10 cm with an overlying skin ellipse of 41 × 4.5 cm in size, weighing 1.3 kg.

On hematoxylin and eosin histology, the epidermis and dermis appeared normal with no significant thinning and with fat being preserved around the adnexal structures (Fig. 2). Orcein staining confirmed the presence of elastic fibers within the dermis, and these showed minimal if any disruption. There was no mitotic activity in the basal layer and MIB1 staining was confined to the basal layer, showing no increased expression in comparison with normal skin, indicating that the epidermal proliferation rate was normal.



FIG. 1. Massive prepatellar bursa.

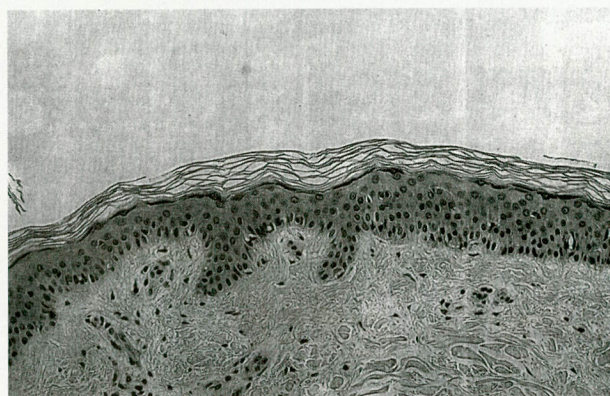


FIG. 2. Photomicrograph showing normal skin appearance with uncrowded basal layer, loose basket-weave keratin, and stable unremarkable superficial dermis (hematoxylin and eosin original magnification, ×20).

Despite considerable work on the matter, the mechanism by which skin responds to mechanical strain still remains unclear.³⁻⁶ Several studies have shown that a gain in skin surface area after expansion could be caused by new skin rather than simply stretching preexpansion skin.⁶⁻⁸

The case presented is unique in that it is the longest described case of tissue expansion, lasting for more than 20 years. Essentially the histologic appearances of the expanded skin in this case were those of normal skin. This finding not only shows that in the long term there is no significant change in the quality of the expanded skin, but also suggests that long-term tissue expansion leads to new skin formation rather than merely stretching of existing structures.

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REPOSITIONING OF A DRAIN

Sir:

The accidental removal of a drain in the postoperative period is a relatively frequent problem. Methods to secure a drainage¹ or to percutaneously evacuate seromas² have been described. Here we report a technique that we devised to ease the repositioning of a displaced drain. The patient whose problem we set out to solve had undergone the second surgical time of mammary reconstruction (prosthesis positioning) only 2 days earlier and, during the night, had pulled out a functioning drain. We considered serum drainage to be necessary because the fluid production was still abundant and the consequent risk of capsule contraction high. The only way to reach the periprosthetic pouch, without reopening it, was to follow backward the path of the previous drain. A drain-needle could have damaged the tissues or the prosthesis (and the same problem would have been created by a syringe needle), and a plain silicon drain was not stiff enough to be pushed inside the pouch.

A steel probe—the shape of a sewing needle, blunt at one end, with a round section and a caliber of 2 mm, 14 cm long, and with an eye at the other end—was chosen among the surgical instruments.

After positioning a 2-0 Dagrofil wire through the eye of the needle, the probe was inserted into the extremity of the drain-tube designed to stay out of the body and pushed to the hollow end of the silicon tube and 10 cm out of it. The wire was still protruding from the external end of the drainage (Fig. 1). The probe, and the drain around it, were then inserted into the skin wound, all the way through the serratus muscle, back into the periprosthetic space. At this point, while one hand kept the drain in its position, the other hand took out the probe by pulling the wire.

This technique was subsequently repeated in another patient who had undergone breast reconstruction: 2 minutes was the total time needed to put the drain back in position.

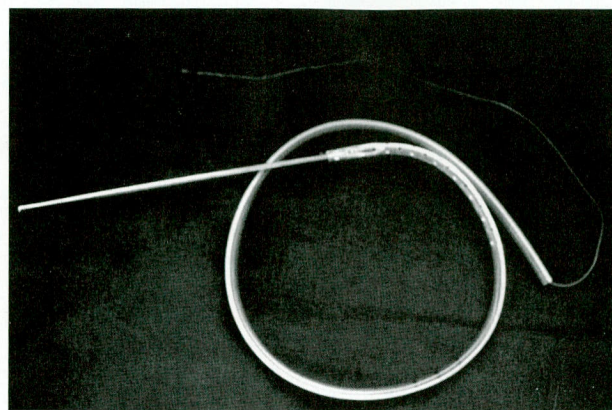


FIG. 1. The probe is partially protruding from the hollow extremity of the drainage while the wire goes all the way through the tube and out the opposite end.

In two additional cases other than breast reconstruction, the method was applied successfully: in a tissue expansion complication in a patient previously treated for Ewing sarcoma of the leg, and for drain positioning through a fistula in a complicated pelvis fracture.

We suggest that this method is quick, safe, and inexpensive and the entire procedure can be performed under local anesthesia.

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FIBROUS RING "PULLS PLUG" ON SALINE-FILLED IMPLANT

Sir:

The cause of deflation of saline-filled breast implants often remains obscure. Deflation rates have been reported that range between 2 and 76 percent.^{1,2} Recent multicenter studies have demonstrated deflation rates between 5.5 and 8.3 percent.^{3,4} Spontaneous deflation accounts for approximately 75 percent of these incidents.⁴ In the majority of cases this is painless and occurs within 24 hours, and less commonly over a few days or weeks. Risk factors thought to be important in implant deflation are implant size of more than 450 cc, implant position, an underfilled implant, intraluminal antibiotics, intraluminal steroids, and pocket antibiotics. We report an unusual case of deflation of a saline-filled implant due to interference by a ring of fibrous tissue, a phenomenon reported also by Slavin.⁵

A 38-year-old woman had bilateral re-augmentation with saline-filled biodimensional McGhan prostheses in 1995. This followed removal of her silicone prostheses due to symptoms