Can Acne Affect Prognosis of Breast Augmentation?

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Sir,

Acneic skin has never been reported as contraindication for surgery. Approximately 290,000 patients underwent an augmentation mammoplasty in 2013, whereas for the same year, the number of implant removals for breast augmentation patients was around 23,700, a 42% reduction since 2000.[1]

A patient's response to an implanted medical device cannot always be predicted. According to Tebbetts,[2] there are 3 major factors that influence the outcome of a breast implant in its new environment—the patient's response to the device, surgery, and wound healing characteristics.

Periprosthetic infection and implant extrusion with or without infection comprise the most common reasons for breast implant removal. Infection rates range between 1% and 35%, and exposure rates do not exceed 8%.[3] Although implant removal is the traditional treatment to the above complications, there is a trend to attempt prosthesis salvage by incorporating minor surgical and antimicrobial therapies.[4]

Acne lesions when left untreated may extend deeply, resulting in sinus tracts and tissue destruction. In a much thinner skin, these complicated lesions may lead to overwhelming results especially when an implant is involved.

CASE DESCRIPTION

We present a 30-year-old female case, post augmentation mammoplasty, with history of papulopustular acne lesions treated with topical antibiotics and retinoid occasionally.

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The patient received 300-cm^3 silicone gel–filled breast implants subglandularly with no immediate postoperative complications noticed. Six months later, she complained of a deep acne lesion complicated with exudate production of her left breast, away from the inframammary incision (Fig. 1). Clinical examination revealed implant exposure.

The culture revealed *Staphylococcus aureus* and received moxifloxacin for a week. In a second surgery, breast implant was preserved. No signs of infection, seroma, and hematoma were noticed. Salvage methods included antibiotic therapy, debridement, pulse lavage, and primary closure. Tissue from the capsule was taken for cultivation with negative results.

The wound was finally healed properly 6 months postoperatively (Fig. 2).

DISCUSSION

Infection, hematoma, excessive seroma, and inadequate soft tissue coverage comprise the most common causes for breast implant extrusion. This is the first case described in which the prosthesis exposure could be related to a common dermatologic disease, acne vulgaris.

Patients with papulopustular acne express both inflammatory and noninflammatory lesions. These may evolve into deep pustules.[5] Placement of breast implants and especially their subglandular insertion causes a rapid expansion, which can end up in a dermal and subcutaneous thinning. This phenomenon in conjunction with deep and inflammatory acne

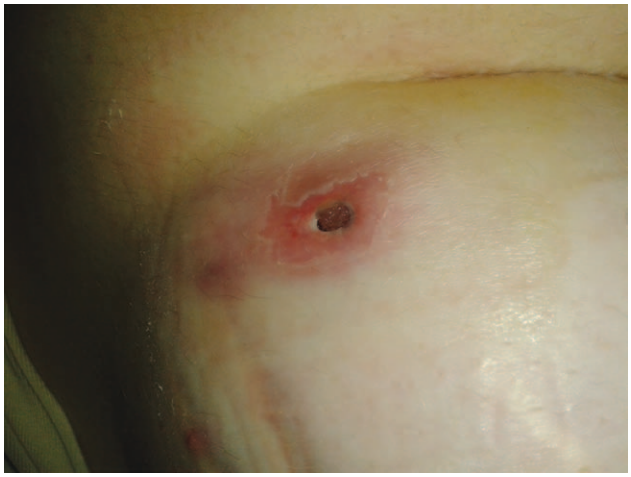

Fig. 1. Prosthesis exposure 6 mo after breast augmentation.

Fig. 2. Postoperative follow-up: complete healing with no signs of infection.

pustules may have as a result the formation of sinuses and tissue destruction especially in areas with very thin skin coverage.

Literature survey, considering the need for acne treatment before an elective surgery, revealed no recommendations for preoperative therapy. Guidelines for acne treatment describe different types of the disease and therapeutical recommendations for each type. Moreover, several articles suggest discontinuance of isotretinoin therapy before surgery. Perhaps a special consideration of skin lesions on surgical site could be of particular importance for a successful, uncomplicated outcome.

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DISCLOSURE

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