



Reconstruction of Areolar-Nipple Complex Following Dog Bite: A Case Report

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INTRODUCTION/BACKGROUND

Dog bites are a worldwide problem. They often occur in the pediatric population or in adult males(1). This bite can have adverse outcomes , mainly infectious complications, amputations and psychological effects. Body image is a very important psychological component to women, as shown by the frequency of body image disorders after breast surgery(2). In this clinical paper, we report a particular case of a dog bite with amputation of the nipple of an adult female

OBJECTIVES

We report a case of areolar-nipple complex (ANC) amputation caused by a dog bite to the left breast, treated surgically with total skin graft reconstruction of the ANC.

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CASE REPORT :

Ms. XX, a 27-year-old woman with no medical history, presented to the emergency department with a complete nipple amputation and torn areolar tissue of the left breast one hour after a domestic dog bite (Figure A). we performed a thorough toilet with saline and debridement of the devitalized tissue. The patient received a prophylactic antibiotic and rabies vaccine. A delayed suturing was decided due to the high risk of necrosis of the remaining tissue of the ANC, therefore the wound was covered. after that we decided a total skin graft reconstruction of the ANC using a graft harvested from the genitocrural fold since the damage was extensive. Under general anesthesia, a circular 4 cm full-thickness skin graft was harvested. Excess tissue was trimmed, the graft defatted and scarified. After hemostasis, the graft was secured to the prepared recipient site (figure B). A sewn-on dressing was left in place for five days under prophylactic antibiotics. The post-operative course was straightforward and the patient was satisfied with the aesthetical result 6 months later.

DISCUSSION

Bites to the breast are rare, with only a few cases previously reported. Hen and al described nipple reconstruction using a fascial flap and purse-string sutures after a human bite, achieving good symmetry (3). Wong and Marck reported reconstruction using a full-thickness skin graft after a horse bite(4). In our case, a full-thickness graft from the genitocrural fold was chosen for its superior aesthetic results. Although several surgical techniques are available, we opted for a full-thickness graft because it undergo less contraction while healing and we opted for the genitocrural fold as a donor site due to its optimal tissue match such as pigmentation and texture, which offer superior aesthetic outcomes for ANC reconstruction.

CONCLUSIONS

As an alternative to other nipple reconstruction techniques, nipple amputation injuries can be treated with full-thickness skin grafts in appropriate emergency situations..



Figure A : a longitudinal posterolateral rupture with a uterine artery rupture and purulent hematoma



Figure B: skin graft reconstruction of the areolar nipple complex using a graft harvested from the genitocrural fold