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Nipple sparing mastectomy: Can we predict the factors predisposing to necrosis?

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Abstract

BACKGROUND:

Nipple sparing mastectomy (NSM) is an accepted surgical approach in selected breast cancer and prophylactic mastectomy, nevertheless post-mastectomy skin necrosis is one of the frequent complications. This study aimed to analyze the factors that may lead to skin necrosis after NSM.

PATIENTS AND METHODS:

From May 2010 to July 2010, we prospectively registered 50 consecutive NSM from 45 patients. There were 40 mastectomies for cancer, and 10 prophylactic mastectomies. The various patient's and surgical factors were registered during pre-, intra- and postoperative period.

RESULTS:

No total necrosis of the nipple areola complex (NAC) was observed. There were thirteen cases with partial necrosis (26.0%) of the areola or the adjacent skin. All these necrosis were partial both for the surface and the thickness. Surgical debridement was performed in 9 (18.0%) cases. The significant risk factors are smoking, young age, type of incision and NAC involvement with areola flap thickness less than 5 mm.

CONCLUSION:

NSM should be done with high caution in smokers. Young patients, periareolar incision and superior circumareolar incision have also a higher risk of necrosis. We recommend keeping areolar flap thickness more than 5 mm in areola region.