Breast Hypertrophy and outcome of Breast Reduction Surgery

Akademisk avhandling

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ABSTRACT

Aim: The overall aim of this thesis was to improve our knowledge of breast hypertrophy in women, its associated problems, and the outcome of breast reduction.

Patients and methods: I. Five hundred and twelve women were studied retrospectively for prevalence of and risk factors for complications. II. The study included 325 women, either randomized to prophylactic antibiotics or not. III. The Breast Evaluation Questionnaire (BEQ) for women with breast hypertrophy and breast reduction was validated. Two hundred and twenty-five women who had had breast reduction surgery and 216 controls were included. IV. Three hundred and forty-eight women were evaluated for gain in health-related quality of life (HRQL) after breast reduction surgery in this prospective, longitudinal paired study.

Results: I. A long suprasternal notch to nipple distance increased the risk of infection and necrosis of the nipple. High BMI increased the risk of wound infection. A larger weight of resection increased the risk of delayed wound healing and fat necrosis. Smokers have twice the risk of getting a postoperative infection and diabetics are at higher risk of nipple necrosis. II. The incidence of postoperative infections was not significantly different between the groups. III. The modified BEQ is valid and shows good reliability. IV. Breast hypertrophy is associated with low HRQL, and breast reduction surgery increases HRQL.

Conclusions: I. Sternal notch to nipple distance, BMI, resection weight, diabetes mellitus, and smoking are independent risk factors for complications after breast reduction surgery. II. One prophylactic dose of 2 g intravenous Cloxacillin or 600 mg Clindamycin did not reduce the incidence of postoperative infections. III. The BEQ has proven to be valid and to have good stability after being modified (mBEQ), when used before and after breast reduction surgery. IV. Women with breast hypertrophy have reduced quality of life and the HRQL is strongly increased or normalized after breast reduction surgery when SF-36, mBEQ, BRSQ, and BREAST-Q are analyzed. Those with a higher body mass index, a longer sternal notch to nipple distance, a larger preoperative breast volume, or large volume of breast resection enjoy gains in health-related quality of life that are similar to, although probably not greater than, other women.

Keywords: Breast, hypertrophy, breast reduction, mammoplasty, complication, prophylactic, antibiotic, infection, validation, reliability, quality of life, questionnaire