Breast reconstruction with expander prosthesis following mastectomy do not cause additional persistent pain – a nationwide cross sectional study.

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Abstract

Introduction: Few studies have examined the prevalence of persistent pain after breast reconstruction with an implant after tissue expansion in comparison to mastectomy without breast reconstruction. Our primary objective was to evaluate the prevalence of persistent pain after breast reconstruction with a subpectoral implant after tissue expansion in a population based study. Secondary objectives were to evaluate sensory disturbances, lymphedema and functional impairment. Method: A nationwide cross-sectional questionnaire study of breast cancer patients aged 18-69 years who were treated with or without reconstruction after mastectomy for primary breast cancer in Denmark between January 1, 2005 and December 31, 2006. The response rate was 84% for mastectomy without reconstruction and 83% for patients treated with breast reconstruction. Results: 129 patients treated with mastectomy and breast reconstruction with subpectoral implant were compared with 1131 patients treated with mastectomy without reconstruction. Prevalence of persistent pain for patients treated with mastectomy followed by reconstruction with an implant was 40% compared to 48% of patients treated only with mastectomy. We found no increased risk of persistent pain in patients having a reconstruction with an implant compared with mastectomy without reconstruction (OR 0.82, 95% CI 0.55-1.22, P=0.33) when adjusting for age, axillary procedure, radiotherapy and chemotherapy. We observed no difference in the prevalence of pain between patients treated with immediate or delayed breast reconstruction (P=0.116). Conclusion: Breast reconstruction with subpectoral implant after tissue expansion does not confer increased prevalence of persistent pain.