Shoulder-arm morbidity following axillary dissection and sentinel node only biopsy for breast cancer

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AIMS
The purpose of this study was to examine the outcome of shoulder-arm morbidity in patients with breast cancer after various axillary staging procedures. We used a new specific summation score to compare conventional axillary node dissection (AD) and sentinel node only biopsy for postoperative shoulder-arm morbidity.

METHODS
Eighty-five patients undergoing conventional AD and 66 patients undergoing sentinel node biopsy were evaluated both subjectively (questionnaire) and objectively (clinical examination) for reduced muscle strength, limited range of motion, lymphedema and pain, dysesthesias and loss of sensitivity. The symptoms elicited were rated by their severity with a single summation score describing all symptoms reported.

RESULTS
Subjective evaluation of patients undergoing breast conserving surgery showed a highly significant difference in favor of SNB only (P< or =0.002). On clinical examination the outcome of patients with SNB only was also significantly or highly significantly better (difference in arm volume: P =0.007; difference in arm muscle strength: P=0.016; loss of sensitivity: P<0.001). Of a total score of 100 (=no symptoms), the mean for AD patients was 80.2 vs 92.8 for SNB patients (P=0.001). In patients undergoing total mastectomy the difference was only significant for pain sensations and total scores.

CONCLUSIONS
SNB appears to reduce morbidity. Summation scores are a suitable and practicable tool for describing the symptoms associated with axillary surgery.