

Does the Surgical Management of the Intercostobrachial Nerve Influence the Postoperative Paresthesia of the Upper Limb and Life Quality in Breast Cancer Patients?

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Abstract

The aim of our study was to evaluate the extent to which the preservation or the section of the intercostobrachial nerve (ICBN) influences the development of postoperatoryparesthesia and to assess whether the development of paresthesiamay change the patient's life quality after surgical treatment for breast carcinoma.

Material and methods: We performed a nonrandomized retrospective study including 100 patients who underwent axillary lymph node dissection for infiltrating breast carcinoma associated with axillary lymph node metastases. Using a questionnaire we studied the patients' general life quality in the postoperative period. For the statistical analysis we used GraphPad Prism, Fisher's exact test and Chi square test.

Results: 100 patients were included in our study with a mean age of 59.7 years. In 50 cases, the ICBN was preserved (Group 1), while in the remaining 50 cases the ICBN was sectioned during surgery (Group 2). Significantly more patients from Group 2 complained about postoperative paresthesia ($p=0.026$). In our series, the management of the ICBN cannot be significantly correlated with the impairment of the patients' daily activities ($p=0.2$), sleeping cycle ($p=0.2$), and general life quality after surgery ($p=0.67$). We can conclude that the management of ICBN has a great influence on the development of postoperative paresthesia. Although the paresthesia does not have a negative effect on the patient's life quality in the postoperative period, in our opinion it is important to preserve the ICBN in order to prevent postoperative paresthesia.

Key words: intercostobrahial nerve, axillary surgery, paresthesia, breast cancer