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SKIN CANCER (OTHER THAN MELANOMA)

## ELECTROCHEMOTHERAPY IN THE TREATMENT OF ULCERATED MALIGNANT TUMORS: RESULTS FROM THE INSPECT REGISTRY

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Background: Electrochemotherapy (ECT) is an effective local treatment for cutaneous tumors and metastasis. Treatment involves the administration of chemotherapeutic drugs followed by delivery of electrical pulses to the tumour. The aim of this study was to investigate the effectiveness of ECT in ulcerated versus non-ulcerated cutaneous tumors and metastases.

Methods: 22 cancer centres in the International Network for Sharing Practices on Electrochemotherapy consecutively and prospectively uploaded data to a database. ECT consisted of intratumoural or intravenous injection of bleomycin, followed by application of electric pulses under local or general anaesthesia.

Results: 716 patients with ulcerated (452) and non-ulcerated (264) cutaneous tumors and metastases were identified from the database with a follow-up of at least 45 days.

Non-ulcerated lesions (overall response 86 %) significantly responded better than ulcerated lesions (overall response 79 %, p=0.0493). In large lesions complete response (CR) versus non-CR between the two groups is statistically significant (p=0.0395).

Prior to ECT, patients with ulcerated lesions have significantly more pain. Immediately after ECT pain is significantly raising in non-ulcerated tumors, whereas in ulcerated lesions it remains stable. With increasing time since ECT the difference in pain intensity between the groups is decreasing becoming not significant after 120 days of follow-up. Odor, suppuration, bleeding and ulceration is improving over time after ECT in ulcerated tumors. No serious adverse events were reported, and the treatment was in general very well tolerated.

Conclusion: ECT is a highly effective local treatment for cutaneous metastases and tumors, with no severe adverse effects. An intense perioperative pain management in non-ulcerated lesions prior to ECT seems to be mandatory since pain raises after treatment. ECT improves quality of life in patients with ulcerated tumors.



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