HOW TO TREAT CUTANEOUS TUMORS, NEW SOP AND SIDE EFFECTS

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By far the greatest body of evidence avialable in clinical use of electrochemotherapy stems from the treatment of cutaneous tumors, primarily metastases but also primary tumors. This means that experience is widespread, and data are available. At the same time the experience from treatment of cutaneous tumors may guide the use of electrochemotherapy for tumors in internal organs as well. After initial studies published in the 90'ies using custom-made electrodes, an important pan-European effort led not only to the publication of the ESOPE study (1), but also to manufacturing of equipment for clinical use (generator and electrodes) and to standard operating procedures (2). This was important in allowing electrochemotherapy to become an available treatment in many European countries. Numerous studies have now beenpublisheddescribingtreatmentresults across tumor histologies, or specifically dealing with e.g. breast cancer metastases (3, 4), malignant melanoma metastases (5, 6), basal cell primary carcinomas (7). In 2013 the National Institute for Health and Care Excellence (NICE), UK, described electrochemotherapy as efficient and without major safety concerns (8, 9). At the same time continuous monitoring of side effects and treatment efficacy through databases such as the International Network for Sharing Practices (InspECT) database was encouraged.

Updated standard operating procedures taking into account the first 10 years of experience after the initial publication of Standard Operating Procedures have been published (10). Briefly, cutaneous tumors maybe treated either under local anesthesia (small, few tumors), or under

general anesthesia (many and/or larger tumors), electrochemotherapy may be given as local injection (small, few tumors), or as systemic infusion (many and/or larger tumors). All solid tumor histologies may be treated with electrochemotherapy. Most cases need to be treated only once, and the response rate is high across tumor histologies.

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