The role of Electrochemotherapy in the treatment of advanced Merkel Cell Carcinoma of the head and neck region

A simple solution for challenging situations
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Introduction

Electrochemotherapy is a treatment combining a low dose of a chemotherapy drug and an electrical pulse (electroporation) applied directly to the cancer cells using an electrode.

This low level dose of chemotherapy drug is not normally effective against the cancer, as it is difficult to get inside the cells. When the electric pulse is applied, the cells form pores allowing the drug to enter and be active against the cancer.

Electrochemotherapy for Merkel Cell Carcinoma patients

Electrochemotherapy as a “new therapeutic strategy in advanced Merkel Cell Carcinoma of the head and neck region.”

Merkel Cell Carcinoma (MCC) is a rare and aggressive tumour, arising from a cutaneous mechanoreceptor cell located in the basal layer of epidermis, with poor prognosis due to the fast local growth and high local recurrence, regional lymph node metastases and distant metastases rates, occurring even after prompt treatment.

In the last years, Electrochemotherapy has been proposed as a therapeutic weapon for the control of recurrent cutaneous and subcutaneous or mucosal neoplastic lesions of different histologies. Scelsi et al[3] report a case of an 84 year old woman with a recurrent MCC of the chin treated with Electrochemotherapy. During the period of 20 months, four sessions of Electrochemotherapy were employed, which resulted in an objective response of the tumour and a good quality of residual life.

“The authors reported a complete response of the tumour to Electrochemotherapy after a follow up time of six months.”[4]
Clinical experience

- Good local tumour control was reached with Electrochemotherapy with no significant adverse events, which resulted in a good quality of life.

- The reported rates of objective response seem promising, ranging from 56% to 100%, depending on the tumour size.

- Electrochemotherapy is simple to use, highly safe, and an effective treatment with no substantial adverse effects.[6]

- The post-operative defect is usually less extensive and less disfiguring than that occurring with excisional surgery, thus improving quality of life.

Conclusion

This case shows the effectiveness of Electrochemotherapy in the treatment of locally advanced MCC of the head and neck region in a patient not suitable for standard therapeutic options. Electrochemotherapy can be considered as an effective palliative treatment option for patients with recurrent or advanced stage tumour.[1-4] Electrochemotherapy may be an effective alternative to the conventional treatment of MCC.
References


