

POSTER PRESENTATION

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Long-term response after electrochemotherapy in patients with relapsed or refractory cutaneous melanoma

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From Melanoma Bridge meeting 2013 Naples, Italy. 5-8 December 2013

Background

Treatment of early and multiple cutaneous unresectable recurrences is a major therapeutic problem with around 80% of patients relapsing within 5 years [1]. For lesions refractory to elective treatments, electrochemotherapy (ECT) involving electroporation combined with antineoplastic drug treatment appears to be a new potential option [2]. This study was undertaken to analyze the short- and long-term responses of lesions treated with ECT with intravenous injection of bleomycin in melanoma patients with in-transit disease or distant cutaneous metastases.

Materials and methods

Between January 2007 and September 2012, 60 patients with relapsed and refractory cutaneous melanoma metastases or in-transit disease underwent 100 courses of ECT with intravenous injection of bleomycin. Response to treatment was evaluated three months after ECT. A long-lasting response was defined as no cutaneous or in-transit relapse after a minimum of six months.

Results

Three months after ECT, a complete response was observed in 29 patients (48.4%), a partial response in 23 patients (38.3%) and no change or progressive disease in 8 patients (13.3%). The objective response rate of all treated lesions was 86.6%. Thirteen patients (44.8% of complete responders) experienced a long-lasting response

to ECT and were disease-free after a mean duration of follow-up of 27.5 months.

Conclusions

The favorable outcome obtained in the present study demonstrates that ECT is a reliable, and effective procedure that provides long-term benefit in terms of curative and palliative treatment for unresectable cutaneous lesions without adversely impacting the quality of life of patients [3-7].

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Published: 6 May 2014

References

- Leon P, Daly J, Synnestvedt M, Schultz DJ, Elder DE, Clark WH Jr: The prognostic implications of microscopic satellites in patients withclinical Stage I melanoma. ArchSurg 1991, 126:1461-68.
- Marty M, Garbay JM, Gehl J, et al: Electrochemotherapy an easy, highly
 effective and safe treatment of cutaneous and subcutaneous
 metastases: results of ESOPE (European Standard Operating Procedures
 of Electrochemotherapy) study. Eur J Cancer 2006, 4:3-13.
- Sersa G, Miklavcic D, Cemazar M, Rudolf Z, Pucihar G, Snoj M: Electrochemotherapy in treatment of tumors. Eur J SurgOncol 2007, 34:232-40.
- Quaglino P, Mortera C, Osella-Abate S, et al: Electrochemotherapy with intravenous bleomycin in the local treatment of skin melanoma metastases. Ann Surg Oncol 2008, 15:2215-22.
- Sersa G, Stabuc B, Cemazar M, Miklavcic D, Rudolf Z: Electrochemotherapy with cisplatin: systemic antitumor effectiveness of cisplatin can be potentiated locally by the application of electric pulses in the treatment of malignant melanoma skin metastases. Melanoma Res 2000, 10:381-85.
- Kaehler KC, Egberts F, Hauschild A: Electrochemotherapy in symptomatic melanoma skin metastases: intraindividual comparison with conventional surgery. *Dermatol Surg* 2010, 36:1200-02.

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 Mozzillo N, Caracò C, Mori S, et al: Use of neoadjuvantelectrochemotherapy to treat a large metastatic lesion of the cheek in a patient with melanoma. J Transl Med 2012, 10:131.

doi:10.1186/1479-5876-12-S1-P1

Cite this article as: Mozzillo et al.: Long-term response after electrochemotherapy in patients with relapsed or refractory cutaneous melanoma. Journal of Translational Medicine 2014 12(Suppl 1):P1.

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