

## Limb sparing treatment of bleeding melanoma recurrence by electrochemotherapy

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### ABSTRACT

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**Aims and background.** Electrochemotherapy is an effective local treatment for tumors that combines administration of a chemotherapeutic drug with the subsequent application of electric pulses to the tumor. In addition, it was also found to have a vascular-disrupting effect. We report a case of limb-sparing treatment of bleeding melanoma recurrence by electrochemotherapy.

**Methods.** After intravenous application of bleomycin (15,000 IU/m<sup>2</sup>), 15 runs of electric pulses were applied by hexagonal needle electrodes (1.7 cm in diameter) in the center of the bleeding melanoma recurrence, and an additional 10 runs of electric pulses were delivered via plate electrodes (8 mm) on the rim of the tumor.

**Results.** Immediately after the administration of electric pulses, the bleeding stopped and did not recur. Crust formation was observed and the lesion decreased in size in a matter of weeks.

**Conclusions.** We conclude that electrochemotherapy should be considered as a treatment option when dealing with bleeding melanoma recurrences as well as a limb-preserving treatment.

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**Key words:** bleomycin, cutaneous tumors, electrochemotherapy, electroporation, malignant melanoma.

*Acknowledgments:* The authors acknowledge the financial support from the state budget of the Slovenian Research Agency (Program No. P3-0003; Project No. J3-7044, J3-9580).

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Received May 12, 2008;  
accepted June 24, 2008.