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The effectiveness of a scalp cooling cap in preventing chemotherapy-induced alopecia

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ABSTRACT

Aims and background. Hair loss is one of the most unpleasant side effects associated with chemotherapy treatments. It causes emotional disturbances and constantly reminds the patient of the disease. This study analyzed the effectiveness of scalp cooling caps in preventing alopecia among 64 patients.

Methods. The patients were given one of the following chemotherapeutic treatments: doxorubicin 60 mg/m^2, docetaxel 80 mg/m^2, FEC (5-fluorouracil 600 mg/m^2, epirubicin 60 mg/m^2, cyclophosphamide 600 mg/m^2) or the combination of three cycles of docetaxel (80 mg/m^2) followed by three cycles of FEC (5-fluorouracil 600 mg/m^2, epirubicin 60 mg/m^2, cyclophosphamide 600 mg/m^2). All the chemotherapy treatments were given in a three-weekly schedule. Patients with early stage disease were given six adjuvant chemotherapy cycles, while patients with metastatic disease were given nine chemotherapy cycles. The patients were provided with detailed instructions on how to treat the hair at home for one to three days after the chemotherapy treatment. Hair loss was evaluated after the third, sixth and final treatments.

Results. In the final results, major hair loss was avoided in all patients given doxorubicin treatment, in 83.3% of patients given docetaxel treatment, in 76.5% of patients given FEC treatment, and in 78% of patients given docetaxel followed by FEC. In the final evaluation, 87.5% of the patients considered the avoidance of hair loss to be important. Only 20.3% of the patients needed to use a wig.

Conclusions. This study shows that all the patient groups studied gained some benefit by using scalp cooling caps. **Free full text available at www.tumorionline.it**

Key words: alopecia, scalp cooling, chemotherapy

Conflict of interest: All the authors declare that they have no conflict of interest with any company regarding this study.

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