

Session M. Oncology nursing

M02* Scalp cooling to prevent chemotherapy-induced hair loss

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Background: Since about 1970 scalp cooling has been used to reduce chemotherapy-induced hair loss, a well documented common cause of distress to patients undergoing cancer treatment, with negative effects on body image and quality of life. We prospectively collected data to evaluate efficacy and safety of this technique, side effects and satisfaction of women receiving chemotherapy as a form treatment for breast cancer.

Methods: The scalp cooling, by using a Paxman machine, it is composed of a refrigerating unit which is connected to a helmet of silicon. Inside flows a liquid which keeps the temperature at -4° C. Was offered to breast cancer patients starting chemotherapy containing anthracycline and/or taxanes; patients could be chemonaive

or pretreated. Infusion times vary according to the schedule. Between June 2013 and December 2014 eighty-nine patients have been utilized in our hospital. Nurses completed questionnaires on patients, chemotherapy and scalp cooling characteristics during each session. Results were evaluated indicating the severity of hair loss according to CTCAE 3.0 during each chemotherapy session and taking into account patient's satisfaction during the last treatment.

Results: All patients were women (one man) with breast cancer who were mainly treated in the adjuvant setting (80%) and are chemonaive. The mean age was 53 years (range 35–72). The median number of cooling sessions was 5 (1–12). 70% of patients received anthracycline-based polichemotherapy (ac or fec 75 every three weeks) and 30% received monotherapy with taxanes on weekly schedule. Alopecia G0 and G1 were registered at the end of chemotherapy in 62% of the patients, irrespective of the type of treatment. 100% of these patients reported to be satisfied in terms of hair preservation during their last session. 27% of patients discontinued scalp cooling treatment because of severe alopecia (G2); all these patients were receiving anthracycline. Scalp cooling was stopped because of intolerance in 11% of patients mainly due to discomfort and longer time of infusion.

Conclusion: The Paxman scalp cooler was found to be an effective technique with moderate side-effects for patients treated with commonly prescribed alopecia-inducing chemotherapy drugs. Lengthening infusion time seems to be the main limit of this system.