

Scalp Cooling: An Oncology Center Experience

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BACKGROUND: Chemotherapy is a treatment modality for several types of cancer, the principal objective is the tumoral cells destruction, however most of this types of medication are not selective causing destruction in the healthy cell too like the hair follicles. This adverse reaction is one of the most feared and stressful caused by chemotherapeutics, especially in female patients, cause a directly interfering in self-esteem and exposes to everyone that she has a cancer diagnosis. To ease this problem, was created an equipment that promises to keeps the head refrigerated, causing a vasoconstriction in the capillary follicles, decreasing the amount of chemotherapy that reaches it causing the alopecia. It's not suitable for all types of chemotherapy.

METHODS: After appointment with the doctor to know what drug the patient will use, we do a verification to check the indication for scalping cooling. In the first day of chemotherapy it's chosen the right size of the cap for the patient. Before chemotherapy infusion, the equipment must be connected for 30 minutes, and stay on during all the infusion, and till 2 hours after the end of session. It consists of a refrigeration unit, the system is charged with a free CFC gas. It's controlled by a touch screen controller with a thermostat and a refrigerator liquid inside of a compressor that circulates through a pump to the cap.

RESULTS: In one year the equipment was used in 31 patients, 29 woman and 2 man in the following protocols: AC-T, T-AC, TC, FAC, FEC and with the drugs, Taxol, Docetaxel, Gemzar, Cisplatin, Irinotecan. Was used photos to measure the amount of hair loss in this patients, since there is no equipment to do this work in the service. The best results was with Taxol and Cisplatin since there's no visible capillary failure. With the others drugs it has partial loss.

CONCLUSION: The scalp cooling is a considerable option when we talk about alopecia prevention. Although not completely effective, it works in some cases making patients more confident to face the treatment. Despite the discomfort caused by long exposure to low temperatures and the result uncertainty, this is the only option available until now, that shows a good results.