Scalp cooling system in preventing chemotherapy - induced alopecia: a pilot study on 108 patients - a romanian Oncology - day hospital experience

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BACKGROUND

Chemotherapy-induced alopecia is still one of the most common and most emotionally distressing side effects of chemoherapy. Chemotherapy-induced alopecia may lead to a negative body image, depression and anxiety. For some, the alopecia is a traumatic event separate from the cancer diagnosis. It can serve as a constant reminder of **"I have cancer".**

Hair loss is associated with :

- Change in concept of self
- Loss of privacy
- Being a reminder of cancer
- Change in sensuality/sexuality
- Diminished self
- Sign of societal failure
- Often considered worse than losing a breast

In preventing this side effect we are using DigniCapTM - DigriC3 scalp cooling system. Factors that influence CIA are: chemotherapy regimen and doses, type of hair, abnormal liver function, age, scalp cooling system used.

METHODS

The aim of this study was to evaluate the hair loss and discomfort in patients using DigniCap system. We analyzed all data from patients that used scalp cooling system from March 2012 until November 2013 in Medisprof Oncology day hospital. 100 patients have completed and 8 patients were still undergoing scalp cooling at the time of our analysis. Variables used: thickness of hair, gender, age; chemotherapy regimen. Alopecia was graded according to US NCI Common Toxicity Criteria for Adverse Events version 4.0/2010. Also, hair loss and discomfort were evaluated by a questionnaire (Dignitana Registration of Data) completed by the patients.

RESULTS

Reasons for ending scalp cooling:

- hair loss - 55 patients
- chemotherapy treatment ended - 34 patients
- discomfort - 4 patients
- other - 7 patients
- scalp coolong not ended - 8 patients

5 of 6 male patients had no alopecia and 1 male patient had grade 1 alopecia

Patients < 50 years (48) had the following results:

- 11 patients no alopecia
- 18 crown - like alopecia
- 19 patients grade 2 alopecia

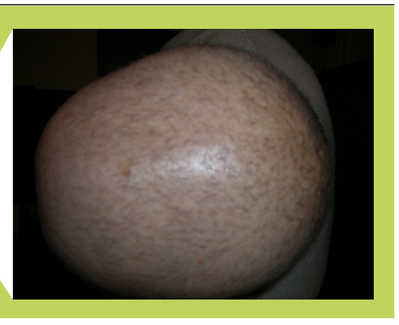
Patients > 50 years (60):

- 12 patients no alopecia
- 21 patients crown like alopecia
- 27 patients grade 2 alopecia

Overall, 23 patients had grade 2 alopecia, 39 patients crown like alopecia and 23 patients had no alopecia.

1

After 1st cycle of chemotharapy (Taxol+Carboplatin) **without using Scalp Cooling System**



2

After 6 cycles of chemotherapy (Taxol+Carboplatin) **using Scalp Cooling System**

3

After 7 cycles of chemotherapy (Taxol+Carboplatin) **using Scalp Cooling System**

CONCLUSIONS

No predictive factors for CIA could be highlighted on this unselected cohort of patients. The DigniCap treatment was well tolerated by the patients. Only 4/108 patients discontinued treatment because of discomfort.

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