

# Peau et phanères

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## Pour en savoir plus

**Kim IR, Cho J, Choi EK, Kwon IG (2012) Perception, Attitudes, Preparedness and Experience of Chemotherapy-Induced Alopecia among Breast Cancer Patients: a Qualitative Study 2012 Asian Pac J Cancer Prev 13: 1383-8**

**Roe H (2011) Chemotherapy-induced alopecia: advice and support for hair loss. Br J Nurs 20: S4-11**

**Grevelman EG, Breed WP (2005) Prevention of chemotherapy-induced hair loss by scalp cooling. Ann Oncol 3: 352-8**

This article provides insight into the growth cycle of a hair follicle and the potential impact *chemotherapy* agents can have on this process, which often results in hair loss (*alopecia*). It explores the psychological consequences of *chemotherapy*-induced *alopecia* for an individual as a result of the perceptions of others as well as an individual's perception of his or her self-image. Despite the development of various forms of scalp cooling, *chemotherapy*-induced *alopecia* remains a major side effect for patients receiving *chemotherapy*; however, there have been improvements in wig provision and changing public opinion relating to baldness. Although *chemotherapy*-induced *alopecia* affects both males and females and all age groups, this article focuses on the potential impact for patients receiving *chemotherapy* as a form of treatment for *breast cancer*. As professionals we need to understand the social significance of hair in relation to a person's outward presentation and social

interactions, along with the possible psychological implications of a person losing his or her bodily hair, and not just the head hair. We must aim to minimize the distress *alopecia* can cause by: ensuring we provide patients with up-to-date verbal and written information to enable them to prepare for losing their hair; helping them to preserve their self-image and minimize the psychological consequences of hair loss while receiving *chemotherapy*; and preparing them for their hair re-growth following completion of *chemotherapy*.

**van den Hurk CJ, Peerbooms M, van de Poll-Franse LV (2012) Scalp cooling for hair preservation and associated characteristics in 1411 chemotherapy patients – results of the Dutch Scalp Cooling Registry. Acta Oncol 51: 497-504**

*Chemotherapy*-induced temporary hair loss is one of the most common and distressing side-effects of *cancer therapy*. Scalp cooling to reduce this hair loss is a controversial issue for many doctors and nurses. This may be due to inadequate knowledge.

This review from 53 publications and three personal communications focuses on the efficacy of the treatment, side-effects, possible disadvantages and the controversies in these areas.

Scalp cooling has become an increasingly effective method to prevent hair loss, especially when anthracyclines or taxanes are used. Unfortunately, many studies were small and badly designed and are therefore difficult to compare. There is a considerable variation in the success rates in the various studies. This remains unexplained, but the cooling time, the *chemotherapy* used and the temperature seem to be influential. Scalp cooling should not be used if *chemotherapy* is given with a curative intent in patients with generalised haematogenic metastases. The majority of patients tolerate cooling very well.

Scalp cooling is effective but not for all *chemotherapy* patients. Further psychological, clinical and biophysical research is needed to determine exact indications for cooling and to improve the effect, tolerance, side-effects and the cooling procedure. Multicentre trials should be carried out to gather this information.

**Kluger N, Jacot W, Frouin E, Rigau V (2012) Permanent scalp alopecia related to breast cancer chemotherapy by sequential fluorouracil/epirubicin/**

**cyclophosphamide (FEC) and docetaxel: a prospective study of 20 patients. Ann Oncol [Epub ahead of print]**

*Chemotherapy*-induced *alopecia* is a frequently occurring side effect of *cancer* treatment with a high psychological impact which can be prevented by scalp cooling. With this multi-centre patient series we estimated the results of scalp cooling for currently used chemotherapies to provide patient information and we identified characteristics associated with the results.

The Dutch Scalp Cooling Registry collected data on scalp-cooled patients in 28 Dutch hospitals. Nurses and patients completed questionnaires on patients, *chemotherapy* and scalp cooling characteristics. Logistic regression analysis was used to examine associated characteristics of the scalp cooling result.

Overall, 50% of the 1411 scalp-cooled patients did not wear a head cover during their last *chemotherapy* session. Patients were satisfied with the results in 8% of cases after TAC *chemotherapy* and up to 95% after paclitaxel treatment. Besides type of *chemotherapy*, higher dose and shorter infusion time, older age, female gender and non-West-European type of hair significantly increased the proportion head cover use. Hair length, quantity, chemical manipulation (dyeing, waving, colouring), wetting hair before scalp cooling, and treatment with *chemotherapy* ever before did not influence the degree of head covering among patients.

Scalp cooling results as recorded in this open patient registry were positive for most regimens, justifying its use by all eligible patients, except for those needing TAC. Lengthening infusion time may improve the results.

To analyze the clinical and histological features of permanent *alopecia* following a sequential fluorouracil/epirubicin/cyclophosphamide (FEC) and docetaxel regimen for adjuvant *breast cancer* treatment.

Women treated for *breast cancer* by a sequential adjuvant FEC and docetaxel regimen who developed permanent *alopecia* diagnosed between 2007 and 2011 were identified from the Department of Dermatology (Saint-Eloi Hospital, Montpellier, France) and the Department of Medical Oncology (CRLC Val d'Aurelle, Montpellier, France). Data were collected regarding demographics, type of *cancer*, delay of onset after *chemotherapy*, Dermatology Life Quality Index® (DLQI), clinical description of the lesions, scalp biopsies, laboratory explorations investigating steroid hormonal, iron, zinc and thyroid status, *therapy* and outcome.

Twenty white Caucasian females were included. Hair loss presented with a moderate or intense androgenetic-like pattern of scalp *alopecia*. Biopsy specimen

examinations were normal or displayed the androgenetic-like pattern. Laboratory explorations ruled out iron or zinc deficiency and thyroid disorders and confirmed hormonal menopause without hyperandrogenism. The overall mean DLQI score reflected the distressing psychological consequences in the patients' lives. No spontaneous regrowth of the scalp hair was noted. Treatment including vitamins, minoxidil, psoralen and ultraviolet A *therapy* and spironolactone proved to be ineffective.

Permanent and severe *alopecia* is a newly reported complication of the FEC 100-docetaxel *breast cancer* regimen.