Multicenter results of scalp cooling to prevent chemotherapy-induced alopecia in 1500 breast cancer patients

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Background

- Severe hair loss is very common in breast cancer patients
- Chemotherapy-induced alopecia (CIA) is distressing
- Scalp cooling:
  - Mostly positive outcomes on CIA reduction, except for TAC regimen
  - Is applied before, during & after chemotherapy infusion
- Aims:
  - Estimate results by type of chemotherapy
  - Identify associated characteristics

Results

- Overall result 48% no head cover (incl. wig)
- Less effective by increasing dose
- Mean age 53 (range 18-81 years)
- 77% treated in adjudvant setting
- 3% stopped scalp cooling because of intolerance
- No scalp skin metastases reported until November 2011

Methods

- 1696 scalp cooled female breast cancer patients
- Scalp cooling using Paxman system (PSC1 or 2)
- Pre cooling time 30 minutes, post cooling time mainly 90 minutes
- 8 Participating hospitals in 2006; 43 Hospitals in November 2011
- Questionnaires completed by patients and nurses
- End point: head cover (incl. wig)
- Logistic regression analysis:
  - 1057 patients included in analysis
  - Associated characteristics determined a priori

Conclusion

Scalp cooling

- Is effective in most breast cancer chemotherapy regimens
- Should be offered to all eligible breast cancer patients, regardless of age
- Is not effective in TAC (75-50-500 mg/m², administered in 90 minutes)
- Seems most effective in taxanes
- Is less effective in South-European, Asian and African hair types

Registration

- Is continuously ongoing in the Netherlands
- Improves patient information
- Improves quality of scalp cooling, because best practices can be detected