SCALPCOOLING AS A METHOD OF AVOIDING ALOPECIA IN CANCER PATIENTS RECEIVING CHEMOTHERAPY

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ABSTRACT

This study has been carried out at the Out-patient Clinic of the Dept of Oncology in the city of Tønsberg, Norway, SV is the County Hospital of Vestfold, with a population of 210,000 inhabitants. Dept of Oncology will be administering approximately 4000 courses of chemotherapy this year. The study period is from April 2000 to October 2001. The aim of the study was to examine the medical effect of Scalp Cooling treatment, and to measure the patient’s response to this type of treatment. Scalp Cooling treatment was offered as a standard procedure to all patients who fulfilled certain criteria. Diagnosis, treatment intention, and the type of treatment were other factors taken into account. The results showed a success rate of 92% for all patients who were treated with FEC or weekly Paclitaxel. The results were based on WHO’s grading for hair loss. Most patients experienced minimal discomfort when using the Scalp Coolers. Only 8% of the patients found the treatment a major problem.

INTRODUCTION

Loss of hair is one of the side effects caused by a number of Chemotherapy regimens. To patients receiving this kind of treatment, the loss of hair adds to the torment of suffering from a serious and potentially fatal disease. Loss of hair has a negative effect both physiologically and socially. This can result in reduced self-esteem, quality of life, and hence isolation for the patient.

In September 1999 the Norwegian breast cancer group decided to introduce new guidelines for adjuvant treatment of women operated for breast cancer and with an increased risk of recurrence. Anthracyclines were introduced as the mainstay agent replacing Methotrexate of the well-known CMF-regimen. This resulted in a new group of patients, mainly young or middle-aged women, experiencing total alopecia due to the anthracycline -content of the FECregimen.

It was therefore decided to introduce scalp cooling treatment in our Department of Oncology with the purpose of preventing alopecia. Scalp cooling is a form of treatment, which has previously been tried out in Norway in women who have gynaecological cancer. The technique of scalp cooling was, however, based on an entirely different and more cumbersome cooling system. European countries who have been using the newer form of scalp cooling treatment, have achieved very good results, also in breast cancer. The technique of scalp cooling was, however, based on an entirely different and more cumbersome cooling system. European countries who have been using the newer form of scalp cooling treatment, have achieved very good results, also in breast cancer. The technique of scalp cooling was, however, based on an entirely different and more cumbersome cooling system. European countries who have been using the newer form of scalp cooling treatment, have achieved very good results, also in breast cancer. The technique of scalp cooling was, however, based on an entirely different and more cumbersome cooling system. European countries who have been using the newer form of scalp cooling treatment, have achieved very good results, also in breast cancer. The technique of scalp cooling was, however, based on an entirely different and more cumbersome cooling system. European countries who have been using the newer form of scalp cooling treatment, have achieved very good results, also in breast cancer.

RESULTS

Table 1 shows the patient status and type of treatment.

Table 2 - 3 shows variables such as pre-cooling, post-cooling and the different medical doses.

Graph 1 shows the total effect for both types of treatment. 92% of all patients retain so much hair that a wig is not necessary.

Graph 2 and 3 shows the patient acceptability of the scalpcooler. 89% of patients described the treatment as acceptable, with minimal discomfort caused by the longer treatment period. One patient did not wish to continue the treatment due to the length of time required to stay in the hospital. Only 2% of patients considered headaches a major problem, whilst 15% of patients considered the coldness factor a major problem. Headaches are a major problem for only 2% of the patients, whilst the coldness factor was a major problem for 15%. One patient discontinued because the treatment caused major discomfort.

92% of the group said they found the treatment to be either unproblematic, or only experienced slight discomfort.

CONCLUSION

Scalp cooling treatment is an effective method for avoiding alopecia in patients receiving chemotherapeutic treatment with courses of FEC or weekly paclitaxel. The patients have minimal discomfort, and there are no significant side effects during the cooling period.