The effect of Oral Lipid Solution and Cryotherapy on Severe Side Effects of High Dose Chemotherapy.

Conclusion

Patients receiving the oral lipid solution episil® and cryotherapy in order to prevent oral mucositis (OM) during myeloablative therapy and autologous stem cell transplantation (ASCT) experienced less oral pain and used less advanced pharmacological pain treatment (PT).

In addition, there was no need for total parenteral nutrition (TPN) and lower grades of OM were detected in the patient group treated with the combination of episil® and cryotherapy compared with the group treated with cryotherapy alone.

Background

OM, a complication of intensive chemotherapy, often requires pharmacological pain treatment (PT). PT has side effects such as nausea, constipation and loss of appetite. Moreover, OM influences food intake and may necessitate use of TPN. Cryotherapy (ice cubes) has been shown to significantly reduce OM but still patients are suffering from oral pain and difficulties in swallowing, episil®, a lipid solution forming a bioadhesive barrier, has been shown to reduce oral pain associated with OM.²

The mechanisms of action of the two treatments are different, which may allow possible additive or synergistic effects on OM for patients treated with high dose chemotherapy before ASCT.

Objective

The objective with the present study was to evaluate if oral cryotherapy in combination with episil®, during transplantation period, reduces OM severity and duration, oral pain and use of TPN, compared with cryotherapy alone.

Method

Twelve patients scheduled for ASCT were included and randomised to experimental group (EXP) receiving oral cryotherapy in combination with episil® (n=6) or control group (CTRL) receiving cryotherapy (n=6) alone. episil® was administered 3 times per day during days 3-10 post treatment of chemotherapy. Data on the number of doses of TPN, oral pain registration using Visual analogue scale 0-10 (VAS), use of PT and grading of OM using WHO scale 0-4, was collected from the patient’s medical and nursing records.

Results

![Graphs showing oral mucositis status and oral pain assessment in EXP and CTRL groups.]

Evaluation of oral mucositis status using WHO scale (0-4) and OM duration in EXP group, receiving episil®, and CTRL group.

- Assessment of pain intensity and duration (VAS 0-10) in EXP group, receiving episil®, and in CTRL group.
- The assessment of pain has not been compensated for the use of analgesics.
- Use of analgesics: patients in the EXP group used only paracetamol, whereas patients in the CTRL group received additional treatment with opioids (Trudesal®).

![Graph showing total parenteral nutrition in EXP and CTRL groups.]

Total number of doses of TPN (total parenteral nutrition) in EXP group, receiving episil®, and CTRL group, during Day 3 to Day 10 after completed High Dose Chemotherapy.

References


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