Observational study conducted in the Oncology Department at the Magodent Hospital at A.E. Fieldorf "Nil" 40 in Warsaw

INTRODUCTION

The primary care issue in patients undergoing oncological therapies, in which drugs are administered intravenously, is to prevent venous complications and perform an early intervention at the time of their occurrence.

The most common form of administration of the cytotoxic drug is the intravenous route. This often leads to the occurrence of an adverse and dangerous phenomenon, which is vein irritation or drug extravasation.

Cytostatics are drugs with a strong irritant effect on the walls of blood vessels, where intravenous administration itself may cause hypersensitivity reactions in patients. The first symptom indicating this is redness in the place of injection.

Some patients may also suffer from phlebitis and irritation of blood vessels.

In addition to the risk resulting from the irritability of cytotoxic drugs, there are additional factors that increase the risk of venous complications in patients undergoing oncological therapies.

They include:

1. The age of the patient (e.g. deposition of atherosclerotic plaques in blood vessels)
2. Comorbidities (e.g. diabetes)
3. Multiple venipunctures.

STUDY DESCRIPTION

The severity of changes was measured on a five-point scale.

0^o – lack of skin lesions

1^0- slight discolouration

2^o- moderate skin discoloration changing into irritation - redness

3^o- irritation and pain in the affected area

4^o- irritation and swelling in the affected area

5^o- a not healing and open wound

Bearing in mind the age of patients and other comorbidities which they suffer from, one should carefully observe the venipuncture to identify lesions that indicate an adverse reaction to the drug.

Additionally, in patients diagnosed with diabetes, an important element is maintaining proper blood sugar levels. Diabetic skin is sensitive to irritation, damages, chemicals and infections. It is associated with a high risk of complications and hence the difficulty in healing skin lesions.

7 women and 13 men aged 51-86 participated in the study.

The observations were conducted from October 9, 2018 to January 7, 2019.

STUDY OBJECTIVE

Determination of the effectiveness of DIABETEGEN in patients undergoing oncological therapies, who have had local skin lesions after administration of cytotoxic drugs.

STUDY MATERIAL AND METHODS

The study covered 20 patients with skin lesions after the administration of 5 Fluorouracil. Each subsequent intravenous administration of chemotherapy results in lesions along the vein. On the site of the venipuncture it is possible to observe red or dark brown lesions. Additionally, they might be accompanied by a burning sensation or pain. Each subsequent administration of chemotherapy causes further irritation of veins which become dark and less visible. There are difficulties in ensuring access to the vein, which may shift the cycle of chemotherapy.

The patients used DIABETEGEN according to recommendations, that is, 3 times a day, applying it on the skin affected by lesions. Lesions appeared on hands and forearms. In the group of study participants, 4 patients suffered from diabetes.

All the patients applied DIABETEGEN on their own.

Check-ups were performed once per 2-3 weeks, depending on the chemotherapy cycle. Each patient had at least 2 check-ups, which were noted down in the observation cards.

In the group of study participants there were no patients with lesions at the 1, 4 and 5 stage.

RESULTS

The stage of lesions before using DIABETEGEN	**The number of patients with lesions at a given stage**
stage 3	9 (45%)
stage 2	11 (55%)

Table 1. The ratio of the number of patients to the stage of their lesions.

The stage of skin regression after using DIABETEGEN	**Ilość osób**
Lack of improvement	6 (30%)
Lesion regression by 1-2 stages	14 (**70%)**

Table 2. The ratio of the number of patients to the stage of lesion regression.

9 patients (45%) suffered from lesions in stage 3, whereas 11 (55%) – in stage 2. 6 patients (30%) did not experience any improvement after using Diabetegen. After regular application of the preparation, it was possible to observe regression of lesions by 1-2 stages in 14 patients (70%), including one person with complete healing of the lesion.

Skin lesions were observed on patients' hands and forearms. They appeared on the site of the insertion of the intravenous cannula. 11 patients (55%) had skin lesions on their hands, whereas 9 patients (45%) – on their forearms. Among these, 4 patients with lesions on their forearms did not observe any positive effects of Diabetegen. 5 patients with lesions on their hands and 5 patients with lesions on their forearms observed the regression of lesions by 1 stage. 4 patients with lesions on their hands experienced complete healing.

There were 4 patients with diabetes type 2 (20%). Lesions on the forearm, stage 3 – 1 patient, stage 2- 3 patients. No improvement observed in 1 patient.

FINDINGS

Patients undergoing oncological therapies require increased supervision of nursing staff, close observation and rapid as well as effective action.

Patients undergoing chemotherapies, who suffered from post-transfusion lesions observed on the injection site, underwent an intensive treatment with DIABETEGEN.

The regression of lesions which appeared after the administration of 5 Fluorouracyl was observed in 70% of patients.

Lesion progression was not observed in any of the patients using DIABETEGEN.

On the basis of the study results, DIABETEGEN received **the best evaluation compared with other products healing wounds available on the Polish market.**

The study was conducted by:

Health Care Manager

Agnieszka Staniak