

IATROGENIC WOUNDS IN ONCOLOGIC PATIENTS

reports of the use of a multifunctional polymeric membrane

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INTRODUCTION / RATIONALE

Radiotherapy and chemotherapy, alone or combined, are the first choice therapeutic modalities in the fight against cancer disease. Although the techniques of ionizing radiation and cytostatic agents have become increasingly advanced and selective, their side effects and iatrogenic reactions still a reality.

It is estimated that 85-87% of patients undergoing radiotherapy may experience skin toxicity - Radiotherapy Induced Skin Reactions. These wounds (in an acute toxicity), reaching only the epidermis can become complex causing problems such as pain, inflammation, trauma, hemorrhage, infection, with serious implications for patient comfort. Find a local treatment that promotes a favorable environment for healing and concurrently that is comfortable for the patient, it is not always easy.

Also chemotherapy, can have severe consequences for the patient's quality of life, particularly when the occurrence of one of its iatrogenic - Extravasation Injuries.

The Extravasation Injuries, the incidence of which is described in literature from 0.1 to 7% (Salunke, A. A., Nambi, G. I., & Sudhakar, N., 2015; Molas-Ferrer, G., Farré-Ayuso, E., doPazo-Oubiña, F., deAndrés-Lázaro, A., Guell-Picazo, J., Borrás-Maixenchs, N., ... & Creus-Baró, N., 2015), are caused by the cytotoxic drug escape the vessel into the subcutaneous tissue, and severity thereof, depending on multiple factors (eg type of agent puncture site). The management of Extravasation Injuries also appears as a complex, and often arise associated with symptoms such as pain, burning sensation, edema or erythema (Molas-Ferrer, G., Farré-Ayuso, E., doPazo-Oubiña, F., deAndrés-Lázaro, A., Guell-Picazo, J., Borrás-Maixenchs, N., & Creus-Baró, N., 2015). Proper use of antidote therapy is essential, but also the choice of dressing material appears as fundamental in controlling the symptoms.

GOALS

- Improve the knowledge about iatrogenic wounds (i.e. Radiotherapy Induced Skin Reactions and Extravasation Injuries) and the most appropriate therapeutic interventions.
- Evaluate the results of the clinical use of the multifunctional polymeric membrane in accordance with international recommendations for the management of these wounds.

METHODOLOGY

- Clinical audit of the use of the multifunctional polymeric membrane dressings in patients with iatrogenic wounds in oncology, conducted by Team Wound Consultation Francisco Gentil Portuguese Institute of Oncology, Lisbon Center.
- Monitoring 3 clinical cases: One with an extravasation injury cytostatic and two with Radiotherapy Induced Skin Reactions, in the neck and lower limbs respectively.

CASE 1

Male, 62 years old with diabetes mellitus, insulin dependent. Clinical diagnosis of neoplasm of the left tonsil treated with Cetuximab and concomitant radiotherapy (beginning to 05/05/2014, 03/07/2014 end, with a total dose of 70 Gy). Radiotherapy Induced Skin Reactions, Grade III, bilateral cervical region without scar evolution, very painful (VAS, 10), low amount of serous exudate, coupled with a severe mucositis (III / IV), led to the suspension of radiotherapy treatment 7 days. **Previous treatments:** Daily application of vaseline gauze impregnated trolamine + wet dressing with nonwoven gauze, involving the entire cervical region. During the suspension of the treatment has been applied zinc cream.



Symptoms / Problems: Pain in the application and removal of these dressings (VAS,10) and slow healing. With emotional lability and anxiety not controlled, related to pain and constant discomfort in the cervical injury. Seriously discouraged, considering refusing the continuity of their radiation treatments. (photo 1)

Start the application of the multifunctional polymeric membrane dressing, and restarting radiotherapy. (photo 2)

RESULTS

Since the first dressing change, immediate pain relief (VAS 0); atraumatic removal; clean wound bed, reducing of the serous exudate. The patient found the courage to finish the radiotherapy treatment.



day 3
Dressing change
Reduction of 50%
(photo 3)



day 4
Dressing change
Reduction of 70%
(photo 4)



day 7
Dressing change
100% healed with 3 dressings of the multifunctional polymeric membrane. Discharge from the radiotherapy, skin care applying dexpanthenol emollient. (photo 5)

CASE 2

Female of 77 years with Mixofibrosarcoma in the right leg, without relevant personal history. After tumor resection, radiotherapy was submitted, ending at 10/05/2016. One week later, there is a Radiotherapy Induced Skin Reactions, Grade III, high extension ($\pm 20 / 10$ cm), with an initial manifestation of a huge blister.

Previous treatments: Daily application with vaseline gauze impregnated trolamine, and in the last day application of polyhexanide biguanide gel, and an absorbent pad.

Symptoms / Problems: Adhesion of the dressing and traumatic removal. Pain that is exacerbated when the dressing change and cleansing of the wound, moderate / heavily exuding, yellow / green, with adhesive plate of fibrin.

Starts application of multifunctional polymeric membrane dressing, fixed with a bandage 18/05/2016 (photo 1).



RESULTS

Since the first dressing change: Pain 0; atraumatic removal; clean wound bed, reduced serous exudate



day 5
Epithelialization around 30%



day 7
Epithelialization around 40%



day 9
Epithelialization around 70%



day 21
100% Re-epithelized just 7 dressing changes

DISCUSSION / CONCLUSION

The results of these clinical cases allows us to check immediate benefits the comfort of the patient, expressed in the control of pain, reduction of inflammation in atraumatic removal and in reducing the number of dressings used.

The wound bed cleansing and debridement capacity of the multifunctional polymeric membrane, together with the reduction of the frequency of dressing change, and increased healing rate, are advantages that translate into greater professional satisfaction and better value for money.

The multifunctional polymeric membrane dressing confirmed that had an effective symptomatic control of iatrogenic wounds (i.e. Radiotherapy Induced Skin Reactions and Extravasation Injuries). This positive income statement reinforced the Francisco Gentil Portuguese Institute of Oncology, Lisbon Center team position in the introduction of the multifunctional polymeric membrane dressing in the recommended protocol dressings list.

CASE 3

3 year old boy, diagnosed with acute lymphoblastic leukemia. Submitted chemotherapy with vincristine. The 30/09/2015 (D7) there is on the back of the left hand, in the peripheral venous access which was given the cytostatic, extravasation signals that were not detected at the time of administration. In marrow aplasia (after chemotherapy).



Previous treatments: daily application vaseline gauze impregnated with antibiotic ointment.

Symptoms / problems: edema, signs of inflammation, loss of epithelium, difficulty in complying with the local treatment for the child's reactivity. Referred pain. Infection risk related to marrow aplasia.

Day 01/10/2015 Start the application of the multifunctional polymeric membrane dressing (photo 1) and start antibiotic therapy (ie Augmentin 650 mg Ev 8 / 8h).

RESULTS

day 4
No pain, tolerated the dressing change and wound vigilance, only uncovering the dressing.

Wound isolated, free of infection and already re-epithelialization (photo 2).



Control lesion within 11 days, with only a dressing change.

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