



# San Raffaele University Hospital

#### **WUWHS 2016 Florence - Italy**

# TREATING WOUNDS CAUSED BY CHEMOTHERAPY, RADIOTHERAPY AND GVHD POST-BONE-MARROW-TRANSPLANT IN HEMATOLOGIC PATIENTS

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#### **BACKGROUNDS AND AIMS:**

to receive an allogenic bone marrow transplant (BMT), Hematologic patients need chemotherapy, and – as per agreed medical protocol – radiotherapy, resulting in a condition of aplasia. These treatments can cause skin rashes that may evolve into wounds. Also, one of BMT complications is Graft versus Host Disease (GvHD) that involves various organs and apparatuses, in particular skin with spot and papule rash, desquamation, blisters similar to burns. Considering the evidence suggested by the literature of the results of Hyaluronic Acid (HA) based treatment on burns and the efficacy of an HA gel1 – Jalosome soothing gel™ Welcare – in other wounds caused by radiotherapy (in patients treated for a solid tumor), we developed a protocol of care combining the use of this gel with a non-adhering silicone dressing2 – Cuticell Contact™ BSN Medical – to treat skin GvHD and chemo/radiotherapy wounds in hematologic patients.

## **METHODS**

A convenient sample of 17 adult patients was recruited, all post BMT (February to December 2015) who developed acute GvHD. Their wounds were treated twice a day applying HA gel, after rinsing with sterile water, through a non-adhering silicone dressing changed once a week.









L.D.: a patient whose GvHD involved face, neck, armpits, chest, abdomen, back and groin. His face that was the more damaged part was completely cured in a month (photos show progress from 10/09/2015 to 21/10/2015).







C. P.: a patient whose GvHD involved lips, neck, armpits, chest, abdomen, back and genitals. Her skin got better in less than a month (photos show progress from 17/05/2015 to 12/06/2015)







F. D. G.: A patient whose GvHD involved neck, armpits, arms, chest, abdomen and back. Her skin was completely cured in 10 days (photos show progress from 06/02/2015 to 15/02/2015).





G. M.: A patient whose GvHD involved chest, abdomen and back. In less than a week he got better (photos show progress from 16/09/2015 to 20/09/2015).

### **RESULTS**

The patients treated with this protocol of care showed a remarkable reduction of pain and an increase in skin regeneration visible within 6 to 15 days. Because of these encouraging results the protocol was extended to patients before BMT, from the day before the first session of radiotherapy.

#### **CONCLUSIONS**

The efficacy of the experimental protocol was such that the researchers applied for approval to the Ethics Committee of San Raffaele University Hospital and implemented the same protocol as a preventive action plan. Further plans of research include the application of the treatment to patients with chronic GvHD.