**Case Study: C030**

**First and 2nd degree burns**

A 38 year old male, smoker, with a general good condition. No use of medication other than analgesics. The patient sustained burns on the hands and forearms extended from above the fingernails to the elbows. Right Arm: fingers 3,4,5 - 1st degree burns (superficial partial thickness). Dorsum of the hand and lateral of the lower arm - 1st degree burns (superficial partial thickness). Left Hand: thumb - superficial. Distal ends of fingers 2,3,4 and 5 - 2nd degree (deep partial thickness). Dorsum of hand, distal end - 2nd degree (deep partial thickness). Dorsum of hand, proximal and extending to distal forearm- 1st degree (superficial thickness).

Left arm: lateral forearm had a wound area of 8x4cm, 2nd degree, (partial thickness) surrounded by 1st degree (superficial thickness) burn area. Total wound area on the arm is 10cmx20cm.

History: the patient had a car accident, and sustained burn wounds to both lower arms. He was admitted to the Unitas hospital (ZA) as a patient of Dr. N. Welkovics. When he arrived at the hospital, the wounds had dressings of Silver Sulphadiazine 1%. The wounds were sloughy, macerated and malodorous according to the sister in the hospital. She preferred to use L-Mesitran Ointment on the wounds and she reported improvement of maceration and odour. The patient was discharged after 5 days in hospital into the care of a private wound care practitioner. The patient experienced significant pain.

**Treatment:** L-Mesitran® Ointment and Soft

**Case study done by:** Dr. N. Welkovics, Unitas Hospital, Pretoria, South Africa.

**Method & observations:**

The wounds continued to be treated with L-Mesitran Ointment on the sloughy areas by using a spatula to apply L-Mesitran Ointment on triglycerate impregnated polyester tulle and placing the tulle on the wound area. Non-slough areas were only treated with the triglycerate impregnated polyester tulle. The gauze was then placed over the tulle and wounds were bandaged. The patient complained of intensive pain for about two hours.

On the third day (pictures 1-3), L-Mesitran Soft was first applied on the non-slough areas, by applying the gel with a spatula on the polyester tulle, and then covering the wound with it. The L-Mesitran Soft was continued on the sloughy areas. The fingers were separately bandaged in an anatomical position to prevent contractions. The patient reported considerably less pain.

On the fifth day of L-Mesitran treatment the wounds on the right arm have no dry skin (pic. 4). Epithelial tissue is observed on the entire wound area. The wounds were left open, and the patient still applied L-Mesitran Soft twice daily.

The middle area of the left arm (pic. 5) with slough is well debrided. Surrounding 1st degree burns covered with epithelial tissue. The treatment continued with L-Mesitran Soft, applied on a polyester tulle and then covering the wound.

On picture 6 one clearly sees that the sloughy areas debrided well. Epithelial islands started to form on the fingers. Dorsum of the hand is mostly covered with epithelial tissue.

On the tenth day of L-Mesitran Soft treatment the left hand is covered with epithelial tissue (pic. 7). On the arm the initial 2nd degree burn area started forming epithelial islands. The patient reports very little pain.

On the last picture taken (pic. 8), the arms are well on their way to complete recovery. The left hand clearly persisted in forming epithelial tissue and is only a few days away from complete recovery.

According to the South African Burn Society burn stabilisation protocol one of the first treatments of burn wounds is to "apply a thin layer of silver sulfadiazine to open areas if transportation will be delayed for more than 12 hours." (Karpelowsky,2007)
**L-Mesitran® Case Study: C030**

Burn wounds are a major problem in South Africa. A retrospective review of a 10-year period, looking at both numbers and the aetiology of burns treated by a burns unit in Gauteng (ZA) showed that despite governmental expenditure to electrify townships and rural areas, the majority of burn wounds are still caused by open flames and paraffin stoves. (Eyal, 2007)

No data was found on burn wounds due to car accidents, but the casualty rate (events causing death and/or serious injuries) for road traffic accidents in South Africa is amongst the highest in the world. (Schoor, 2001)

**Conclusion**

A 38 year old male patient sustained burn (1st & 2nd degree) injuries on both his arms due to a car accident. After initial treatment with L-Mesitran Ointment, nursing staff switched to L-Mesitran Soft because of the heightened sensitivity the patient endured with the L-Mesitran Ointment (due to the osmolarity of the product). The L-Mesitran Soft products quickly desloughed and debrided the wounds. The patient showed quick epithelialisation on the right arm, left arm and hand. In seventeen (17) days the patient recovered with little to no scarring. No adverse reactions were reported.

**References:**

