

II Degree Scald Burn in a Child

Age: 2
Sex: Female
Etiology: Hot Water Scald Burn

Diagnosis

Combustio thoracis, abdominis et reg. mentalis gr. IIa
 9% TBSA, Schock e combustione.

History

A 2-year old girl suffered IIa degree burns corresponding to 9% TBSA upon having knocked over a cup of hot coffee from a table onto herself.

Local Findings on Admission

Epidermis torn out in a V-shaped area on the ventral part of the patient's thorax, wound bed erythematous, oozing. Oozing areas with torn-out epidermis on her chin. Total burned area 9% TBSA, IIa degree.

Therapy

A 2-year old girl was admitted to the intensive care unit of a burn centre where intense anti-shock therapy and continuous analgesic sedation were administered, and the patient was thoroughly monitored. No complications during her hospitalisation at the ICU, local treatment initially conservative, wounds covered with Xe-Derma®, dressing replacement every other day. Wound areas on the chin and on the ventral part of the thorax under Xe-Derma® with progressive epithelisation, healed on Day 8, except for the proximal area over her sternum where the burn was deeper (III degree) on 0.75% TBSA.



Fig. 1: Day 0

Admission, local findings – Epidermis torn out in a V-shaped area on the ventral part of the patient's thorax, wound bed erythematous. Oozing areas with torn out epidermis on her chin. Total burned area 9% TBSA, IIa degree.



Fig. 2: Day 0

Upon admission, local Xe-Derma® application on all wound areas on the ventral part of thorax and on the chin



Fig. 3: Day 8

Photo prior to Xe-Derma® removal. Areas under Xe-Derma® healed, except for 0.75% TBSA above the sternum where the burn had been III degree. In this location, Xe-Derma® dissolved and not applied again.

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On this area, chemical necrolysis (20% benzoic acid ointment) was applied locally; subsequently, on Day 13, a surgical solution was chosen — abrasion and skin autografting were performed under total anaesthesia, for 0.5% TBSA. The surgery and the post-surgery care with no complications, general or local. The grafts are healing, epithelisation progressing on the donor area. On Day 19 (Day 6 after the surgery), the patient is discharged, her treatment to be continued on an outpatient basis. At discharge, 1 cm² located at the edges of the graft remains yet to be healed, as well as 1 cm² of the donor area.

Total Treatment Duration: 8 days

Total Number of Xe-Derma® Applications: 1



Fig. 4: Day 8

Photo after removing Xe-Derma® from healed areas. Surgery on Day 13 — abrasion and skin autografting for 0.5% TBSA



Fig. 5: Day 19

Scars in areas healed under Xe-Derma® calm, pink, level, normal pigmentation, pliable, Vancouver Scar Scale 2 points. Proximal area above the sternum, Day 6 after surgery — 1 cm² at the edges of the graft remain to be completely healed yet.



Fig. 6: Local findings 11 months after surgery

Ventral thorax areas healed under Xe-Derma® with excellent scarring result, fully faded, normal pigmentation, fully level with the surrounding healthy skin, with normal pliability. In the proximal area over the sternum — post-necrectomy and skin autografting, scars at present after a second cycle of laser therapy — pink, irregularly elevated over surrounding skin, max. height 2 mm, normal pigmentation, pliable under pressure, Vancouver Scar Scale 4 points.