STUDY SHOWS:

EPICITE HYDRO ADDRESS CHALLENGES, SIMPLIFY DRESSINGS AND REDUCE TIME AND COST ON FACIAL BURNS (n= 33)

The study shows an impact of epicite[hydro] (EH) on:

Optimizing wound management, provide pain relief and reduce risk of infection

- Ability to moisturize the skin while reducing level of exudate
- Relieves pain immediately after application due to cooling effect
- Fewer procedures and lower procedure related pain
- Protects against contamination - seems to prevent infection

Simplified procedure on a hard-to-dress area, reduce cost and time consumption and improve healing time

- Simplified procedure
- No need for cleaning the wound during wound care
- Reduces time consumption
- No change of EH in any cases
- Faster healing [av. day 8,8]

Improving comfort for the patient and provide better outcome

- Less exudation
- Improved mobilization
- Improved opportunities to achieve nutritional needs
- Early discharging
- Less invasive scaring
- Overall high satisfaction among the patients with EH
- Time and cost saving for both patient and the hospital

CHALLENGES WITH FACIAL BURNS – FORMER TREATMENT

1. Time consuming and repetitive application, risk of complications and painful for the patients

Sterile vaseline and wound cleaning x2 per day

- Wound cleaning associated with pain
- Time consuming, depending on compliance
- Weak procedure in matter of avoiding and preventing infections

Can we optimize wound management, relief pain and reduce risk of complications/infection?

2. Hard-to-dress area, time consuming observation and assessment

A hard-to-dress area due to contours of the anatomy

- Intimacy
- Challenges according to movement
- Procedure related pain

Can we simplify procedure, reduce cost and time consumption and improve healing time?

3. Patients discomfort of former treatment

Very restrictive for the patient

- Massive exudation
- Isolation of the patient and mental impact
- Loss of appetite, loss of important nutrition factors
- Slow healing

Can we accommodate patient comfort and provide better outcome?

INTERVENTIONS - CHANGE OF PRACTICE

Trial 2019/2020

The objective:
Can we with the use of epicte

- Improve healing time of facial burns
- Reduce time of hospitalization
- Save time for the nurses
- In addition: covering patient experience

New Treatment Guideline spring 2020

- Implementation of epicite for facial burns, Denmark
- Continued collecting data for further 6 months
- 40 patients included, complete data in 33 cases

NEW TREATMENT GUIDELINE

Step by step:

- Clean the wound, remove bullae and loose skin and perform wound inoculation
- Clinical photos before application
- Apply EH facemask or/and pads with an overlap of 2-3 cm on intact skin. Can be cut to size if needed
- Cover EH with a secondary dressing: 1-2 layers of Jelonet, 1-2 layers of sterile gauze and fixation
- Absorbent secondary dressing can be changed as needed or completely removed, when the wound does not exudate
- The following days EH will detach from the edges as the wound epithelializes. The edges of EH are cut continuously until EH is spontaneous removed due to healing
- Areas not covered with EH must be cleaned and applicated with vaseline at least two times a day, e.g., lips

PROCEDURE FOR THE STUDY

Parameters in the questionnaire:

- TBSA of the face and location
- Application of EH and time consumption
- Variants of EH used and how many
- Use of secondary dressing
- Patient experience of application
- Relevant for future treatment

At inspections:

- Does EH stay on the burn as expected
- Change/discontinue secondary dressing
- Observation and assessment of: Oedema, pain, itching, signs of infection and signs of healing
- Ease of use and time consumption
- Patient experience
- Removal of EH

Easy to use hydro active dressing for hard-to-dress areas

New treatment guideline
33 cases with facial burn

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RN., Assistant Ward Nurse Kitt Lynge
RN., Clinical Research Nurse Amalie Mannov

This project is non funded.

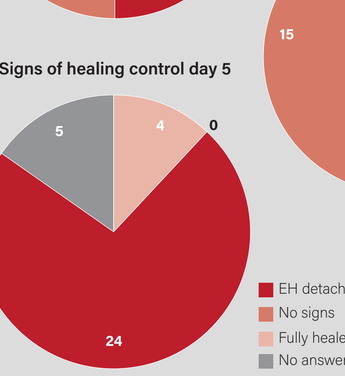
APPLICATION OF EPICITE

within 48h of accident (n=33)

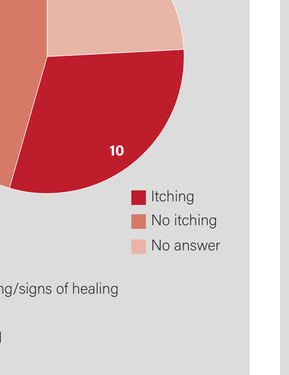
Application and handling: 100% very easy

All nurses stated treatment with EH as 100% relevant as new procedure and 100% time saving compared to former treatments

Choice of epicite



Time consumption



DATA

(n=33)

- Burns were superficial and deep 2nd degree burns as well as 3rd degree burns
- TBSA involvement of the facial burns, 33 cases, varied between 0,5-3,5%

Age (2-84)	
2-9YO	n=5
10-16YO	n=1
17-29YO	n=6
30-39YO	n=6
40-49YO	n=5
50-59YO	n=3
60-69YO	n=4
70-79YO	n=2
>80YO	n=1
Av. Age adults: 45Y	

Male: 30	Female:3

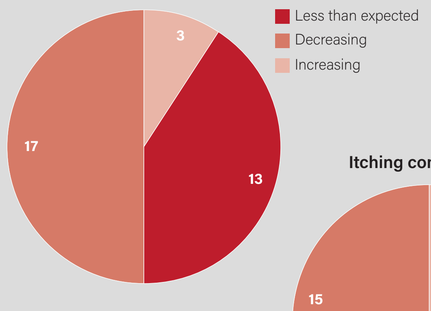
Cause of accident	
Open fire flash burn/explosion (petrol, bioethanol, gas/ ignited pepper spray)	n=25
Scalding	n=5
Contact burn (fireworks)	n=1
Electrical burn	n=0
Chemical burn Etching (caustic soda, boiling zinc)	n=2

Application of epicite after accident	
Day of accident	n=18
Within 24 hours	n=14
Within 48 hours	n=1

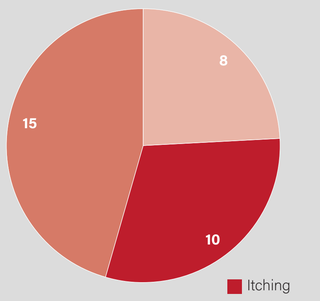
OBSERVATION AND ASSESSMENT

oedema, itching and signs of heeling (n=33)

Edema control day 2



Itching control day 5



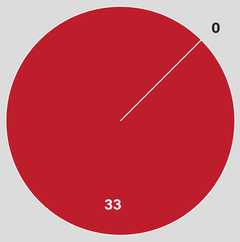
Signs of healing control day 5

OBSERVATION AND ASSESSMENT

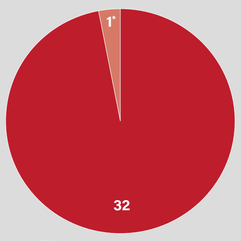
signs of infection and removal of epicite (n=33)

- EH removed on av. day 8,8 (27 cases)
- No data on removal in 3 cases (removed by pt. after discharge)
- 7 cases healed within a week (day 5-7)

Signs of infection control day 2 & control day 5



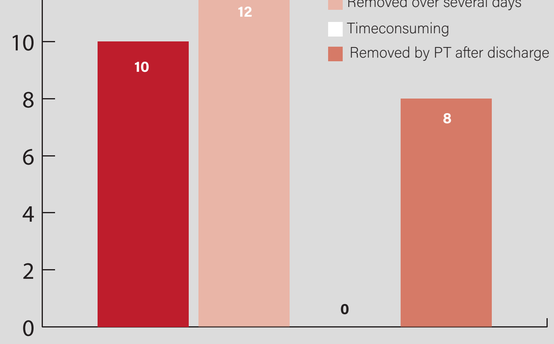
Signs of infection control day 10



**) One patient had signs of infection in terms of exudation and odour day 10, uncomplicated healing despite this.*

Removal of epicite - Nurses experience

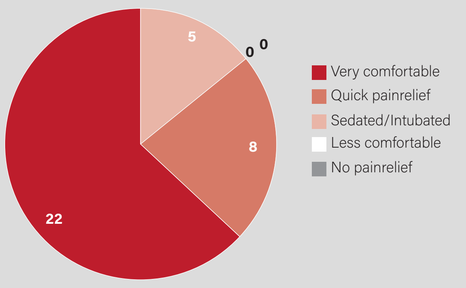
approx. day 10 or spontaneous removal



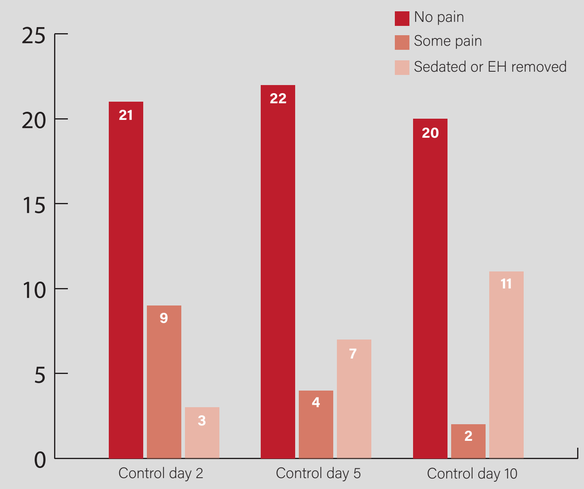
PATIENT EXPERIENCE

application and treatment with epicite (n=33)

Application of epicite within 48h



Level of pain



Hospitalization time depends on the total TBSA

- 12 patients had a total TBSA <5% - of those: 7 patients had a burn limited to the face
- The average hospitalization time of those 12 patients: 6,75 days [1-24]

Days of hospitalization	No. of patients	Av. total %TBSA	Av. %facial burn (reg.)	Av. %facial burn (<100)
1-9	12	2,8	2,0	54,5
10-19	12	10,8	2,6	58,3
20-29	4	9,8	3,0	82,5
30-40	4	22,9	2,3	64,3
130	1	69	3,5	100

This project focuses on facial burns, why we calculate the whole face as 100%. A 100% burn is a full-face burn.

CASE 1: 8YO BOY – 40 % OF THE FACE — CONTACT BURN FIREWORKS

Day of accident (day 0)

Observation & assessment: Day 1 — Day 5 — Day 9 — Day 12

CASE 2: 22YO WOMAN – 100% OF THE FACE — OPEN FIRE FLASHBURN

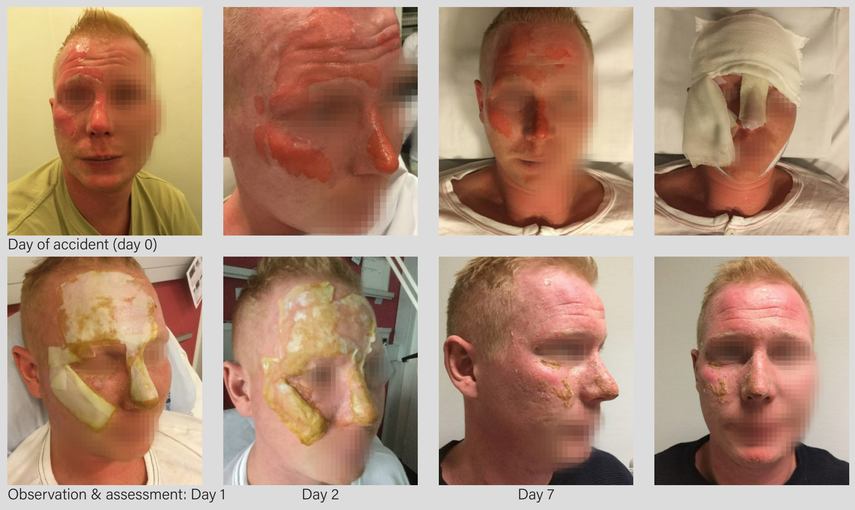
Day of accident (day 0) — Day 4 — Day 5 — Application of EH: Day 1 — Day 6 — Day 7 — Observation & assessment: Day 3

Day 8 — Day 10

The marked areas were not covered with epicite

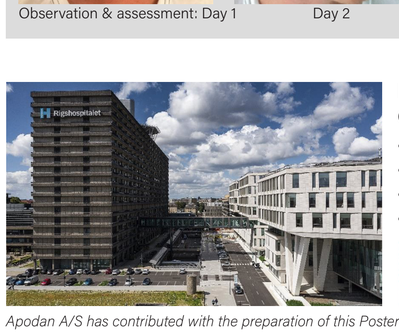
FIXATION CASE

CASE 3: 33YO MAN – 29 % OF THE FACE — SCALDING



Day of accident (day 0)

Observation & assessment: Day 1 — Day 2 — Day 7



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DEPARTMENT OF PLASTIC SURGERY AND BURNS TREATMENT COPENHAGEN UNIVERSITY HOSPITAL, RIGSHOSPITALET

- The Burns Unit services Denmark, the Faroe Islands and Greenland
- Rigshospitalet is responsible for National Guidelines for treatment of burns in Denmark
- The department assesses approx. 10,000 patients annually and admits approx. 250 patients per year
- Highest number of patient references at the entire Rigshospitalet

Rigshospitalet — The Capital Region of Denmark

Apodan A/S has contributed with the preparation of this Poster

epicite hydro

PRODUCT FACTS

- Biotechnology derived cellulose
- Contains a minimum of 95% isotonic saline solution
- Immediate pain relief due to cooling effect
- Reduces edema
- Absorbs wound exudate
- Provides a protective barrier

ADVANTAGES, EG.

- Very easy to apply and adapt to the shape of the face
- Ensures a continuous moisture to the wound
- Easy observation and assessment
- Fewer procedures