

Surgical wound and scar healing in EB

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Thankyou

- DEBRA
 - The Australasian Blistering Diseases Foundation
 - Participants
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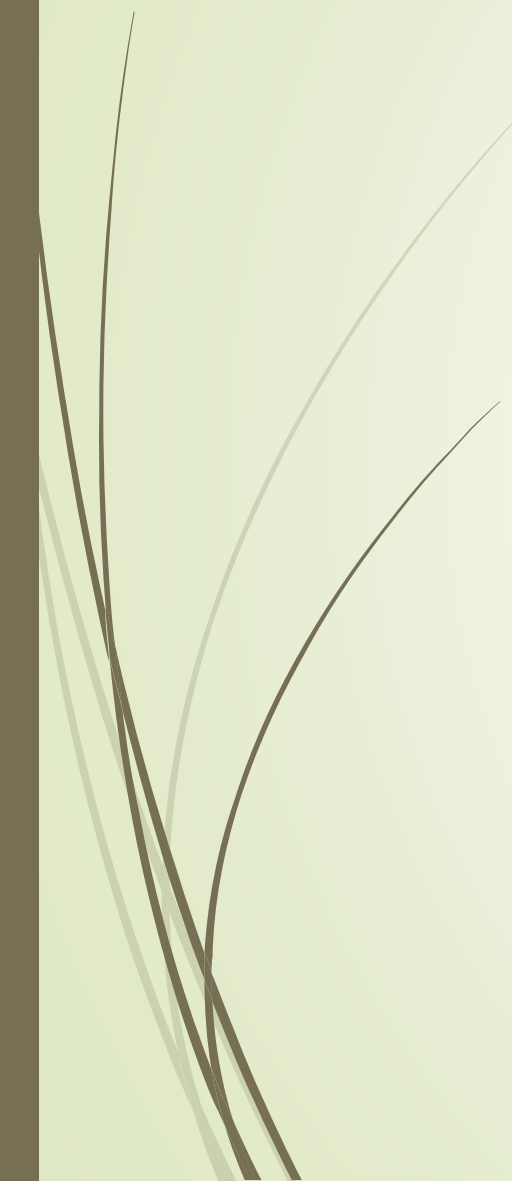


Surgical wound and scar healing in patients with EB - Background

- Limited evidence to suggest patients with EB have more postoperative wound complications than the general population
- In our experience, postoperative wounds in heal well and infrequently become infected or dehisce
- Reluctance amongst some surgeons to operate on patients with EB because of wound healing concerns
- Concerned this may detriment patients



Methods

- ▶ Participants recruited from Australia and NZ
 - Australian National Diagnostic Laboratory Database for EB
 - Australasian EB Registry
 - ▶ Asked to complete the 'Surgical Wound and Scar Healing in EB' questionnaire
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Surgical Wound and Scar Healing in EB

Date: _____ Name: _____
Gender: _____ D.O.B: _____

1. What type of EB do you have?

- EB Simplex Dominant Dystrophic EB
 Junctional EB Recessive Dystrophic EB

2. How many surgical operations have you had that have involved cutting through the skin?

- 0 - please skip to question 18
 1 - continue to question 3
 More than 1 - please fill out a separate form for each operation (even if for the same site, do not include dental work or eye surgery)

3. What was the operation for? What did it involve?

4. Was the operation?

- Planned (elective) - e.g. feeding tube inserted into your stomach, planned caesarean section, removal of a skin cancer or correction of a bone deformity
 An emergency with no damage or contamination of the skin - e.g. having your appendix out, having an emergency caesarean section
 An emergency with damage or contamination to the skin - e.g. drainage of an abscess or an open fracture
 Other - please provide details

5. How old were you when you had the operation?

- Child (0-12 years) Teenager (13-17 years)
 Adult (18-64 years) Senior (65 years or over)

6. Where was the skin cut for the operation?

- Face Scalp or neck
 Chest Breasts
 Abdomen Back
 Arms Hands
 Groin Buttocks
 Legs Feet
 Other - please provide details

7. How big was the wound?

- Very small (<7mm) - e.g. a skin punch biopsy
 Small (7mm-2cm) - e.g. key-hole surgery
 Medium (2-6cm)
 Large (>6cm) - e.g. abdominal or chest surgery

8. How was the wound closed?

- Sutures or staples on the outside
 Dissolvable internal sutures
 The wound required a skin graft
 Other - please provide details

9. Did you develop blisters at the wound site after the surgery? (not related to bandages, tapes, cannulas etc.)

- No
 Yes - if so do you think they interfered with the wound healing? Yes No

10. Did you develop blisters/wounds due to bandages, tape or IV cannulas etc. while in hospital?

- No
 Yes - please provide details

11. Did you develop any postoperative complications?

- No
 Yes - please specify:
 Wound infection requiring antibiotics
 Wound dehiscence (stitches/sutures/staples broke and the wound opened up)
 Other - please provide details

12. How long did the wound take to heal?

- Less than one week
 One to two weeks
 Two weeks to one month
 One month to three months
 Three months to a year
 It never healed (I still get problems with the skin breaking down where the operation was)

13. Comparing the healing of the wound to someone who didn't have EB, do you think the wound healed?

- Slower
 Faster
 The same

14. How did the scar heal?

- Flat Keloid (raised)
 Hypertrophic (thickened) Atrophic (sunken)

15. What color is the scar now?

- Lighter than my skin Darker than my skin
 Red Same colour as my skin
 Other - provide details

16. What is your opinion of the scar now?

(very ugly) 0 1 2 3 4 5 6 7 8 9 10 (perfect)

17. Do you have any advice for doctors looking after patients with EB in the hospital after having surgery?

18. Thank you for completing the questionnaire. Do you have anything else you want to add that may be relevant?

Contains eighteen questions regarding participants' previous surgical procedures and the resultant postoperative wound and scar outcomes



Results

- Response rate 26%
- 46 patients completed the questionnaire for a total of 94 different surgical procedures
 - 28 with EBS
 - 4 with JEB
 - 11 with DDEB, 3 with RDEB
 - Nil with KS



Results

- ▶ Number of surgeries per patient ranged from one to six, with a median of one surgery per patient
- ▶ Most frequent surgery was an excision of a skin lesion, followed by musculoskeletal surgery



Results

- 5 participants (10%) after 7 surgeries reported blistering at the surgical wound site
 - all five had generalized forms of EB
 - all except 2 felt this impaired wound healing
- 11 (24%) after 27 surgical procedures reported blistering not directly related to the surgical wound



Results

- ▶ 4 reported wound infections requiring antibiotics
- ▶ 1 reported wound dehiscence
 - 71-year old female with DDEB post open appendicectomy at age 7



Results

- 20 participants had 34 postoperative wounds, which they felt healed slower than someone without EB
- 30 participants had 55 wounds which they felt healed at the same rate
- 3 patients had 5 wounds which they felt healed faster
- The postoperative scar healed with keloid or hypertrophic scarring in 26%



Conclusions

- Blistering at the postoperative site is uncommon and unlikely in localized EBS
- After surgery blistering at other sites is fairly common
- Postoperative wound infections and dehiscence are uncommon
- Wounds may heal slower than those without EB
- Patients with EB may have a propensity to develop keloid or hypertrophic scarring



Conclusions

- ▶ With this data, we hope clinicians will have greater confidence in referring patients with EB for surgery, and surgeons and patients more reassured about postoperative wound healing