

# UTILIZATION OF TRANSFORMING POWDER DRESSING (TPD) TO TREAT LOWER LEG FRICTION BURN FROM A SPORTS RELATED INJURY: A CASE STUDY COMPARING STANDARD OF CARE RECOMMENDATIONS TO TREATMENT WITH TPD

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## INTRODUCTION

Friction burns (FB), commonly called road rash, are superficial injuries frequently associated with sports activities and road accidents. FB are caused when the skin rubs into another surface and the friction produces a painful abrasion.

Standard of care (SOC) recommendations to treat FB include topical antibiotics to help reduce infection risk and keep the wound moisturized, daily dressing changes, and ibuprofen or acetaminophen for pain management.<sup>1</sup>

## METHODOLOGY

This case report presents a 15-year-old male who sustained a 12 cm (length) x 5 cm (width) painful FB on his right lower anterior leg while playing Lacrosse. After the wound was cleaned, transforming powder dressing (TPD\*) was applied to the leg wound to determine how utilizing TPD compared to traditional SOC used for multiple prior, similar FB injuries.

TPD aggregates upon hydration to form an extended wear (up to 30 days) moist, oxygen-permeable barrier that helps to cover and protect the wound from contamination. TPD can be topped off as required and secured with simple secondary dressings in areas of high friction or exudation. TPD flakes off as the wound heals.

## REFERENCES & ACKNOWLEDGEMENTS

1. Web MD. First Aid & Emergencies. What to Know About Road Rash. Accessed 03JUN2024.

**Acknowledgements:** This poster is supported by Altrazeal Life Sciences Inc. (ALSI.) For application instructions and risks of this device refer to Altrazeal Instructions for Use. | EDU-0172

## RESULTS



- **The wound healed with one initial application and one top-off over 8 days**
- Pain scores reduced from 4/10 before TPD application to 0/10 post the first application
  - The patient experienced no pain for the duration of the wound. No pain medication was required
- On day 2, the secondary dressing fell off and was not reapplied
- On day 3, TPD topped off because it got washed off when patient showered
- On day 8, the TPD matrix began flaking off and the wound was healed

## DISCUSSION

The FB healed quickly with no infections or other complications. Wound pain was relieved when the TPD dressing was initially applied, the patient did not require pain medication, and the pain did not reoccur. The patient reported that his wound was easier to take care of and required fewer dressing changes than other treatments he has used for similar wounds previously.