TREATMENT OF PARTIAL THICKNESS BURNS IN OUTPATIENT SETTINGS WITH ALTRAZEAL

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altrazeal®
transforming powder dressing
up to 30-day wear time

Baton Rouge General

COMPANY MISSION | ACHIEVEMENTS TO DATE

OVERVIEW: Small business enterprise based in Addison, TX specializing in development of wound care and drug delivery technologies

MISSION: To improve the lives of patients the world over by delivering comprehensive solutions that optimize outcomes for patients, providers and payers

ALTRAZEAL STATUS: Patent granted / market launch initiated

Used in several prominent health systems across the United States and internationally

DOD / VA EFFORTS: DAPA listed. SAM registered. Approved for use in several VAMCs

DOD FUNDED R&D PROJECTS: DoD funding awarded for three post-marketing clinical studies and pre-clinical studies for new products:

- MTEC-NAMD: Pre-clinical and clinical studies in burns and diabetic foot ulcers
- CDMRP-PRMRP-DHA: Clinical study in pressure injuries
- SBIR Phase I & II-DHA-WRAIR: Pre-clinical studies for drug delivery combinations
- MIDRP (contract pending): Pre-clinical studies for drug delivery combinations

UNIQUE EXPERTISE: Partnerships with global wound care experts / centers of excellence

ALTRAZEAL® TRANSFORMING POWDER DRESSING

Altrazeal is comprised primarily of two biocompatible polymers (similar to those used in contact lenses). Upon hydration, its granules aggregate into a moist, oxygen permeable barrier that protects the wound from contamination while helping manage excess exudate through vapor transportation. Once applied, Altrazeal may be left in place for up to 30 days. Powder may be added ("topped off") as needed without requiring primary dressing changes. As the wound heals, Altrazeal dries and flakes off. Simple secondary dressings may be used in areas of high friction or exudation.

INTRODUCTION AND CASE OVERVIEW

Burn injuries are common; over 11 million casualties are recorded annually[1]. Protocols to treat burn injuries are well-defined and typically incorporate wound debridement, moist wound dressings, antimicrobials for infection management, and pain medications, all which are vital for successful re-epithelialization of the wound.[1,2,3] Management of acute burn pain is particularly critical, as frequent dressing changes and exposure to air currents or any perception of contact can induce intense pain and anxiety, limiting a clinician's ability to provide adequate wound management.

This prospective case series summarizes the results from management of 9 patients, 6-32 years old, with acute partial thickness burns [1-12% total body surface area (TBSA)] who presented to the burn center and outpatient clinic for initial or follow up management of their burn injuries. All patients were treated with a single application of Altrazeal secured with a nonadherent layer and gauze. Patients were monitored for 30 days for wound healing, pain reduction (including pain medications) and dressing change frequency.

REFERENCES AND ACKNOWLEDGEMENTS

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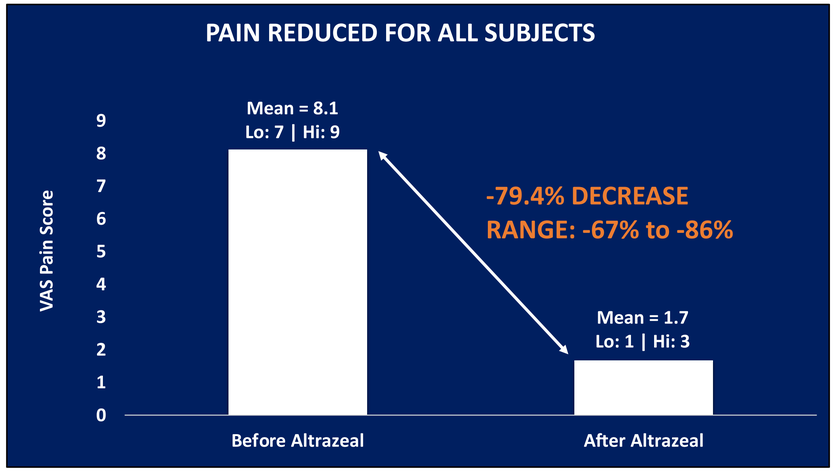
SUMMARY RESULTS

Age (Yrs) Sex (M/F)	Type	Location	TBSA (%)	Days to Heal	Pain Before Treatment	Pain After Treatment	Pain During Treatment
17 | M	Flash Burn	Hand	2	14	9	2	1
6 | F	Flash Burn	Lower Legs	12	9	9	2	1
21 | M	Grease Burn	Hand	2	16	9	1	0
26 | F	Scald Burn	Ankle	2	11	7	3	0
10 |F	Hot Surface Burn	Hand	1	9	8	2	0
32|M	Scald Burn	Arm	4	14	8	1	0
27 | M	Gunpowder Burn	Hand	2	14	8	2	0
31 | M	Grease Burn*	Arm	3	10	8	1	1
29 | M	Grease Burn	Hand	1	12	8	1	1
		Average		**12.1**	**8.1**	**1.7**	**0.4**
		Sdev		2.5	0.6	0.7	0.5
		Min		**9**	**7**	**1**	**0**
		Max		**16**	**9**	**3**	**1**



*A percentage of original burn had dressing removed early and this was the only assessed as 70% re-epithelialized. The area covered by the Altrazeal was 95% re-epithelialized or better at 10 days.

CONCLUSION

All patients healed with a single application and no reported complications, including infections. There was a rapid decrease in pain reported by all patients after Altrazeal application. The patients did not have any significant scarring and did not lose range of motion. Altrazeal presented an easy to use and cost-effective alternative to conventional methods for management of partial thickness burns.

ILLUSTRATIVE CASES

INITIAL TREATMENT

26 y/o male with 2% TBSA grease burn on left hand

- Silver sulfadiazine used 2x daily for 2 days
- Treatment stopped due to pseudo eschar formation and pain during dressing changes

POST ALTRAZEAL

- Wound healed in 11 days with one application
- No loss of flexibly or range of motion
- Pain subsided from 9/10 to 0/10 (-89%)

Day 1

Altrazeal Application

Day 11

INITIAL TREATMENT

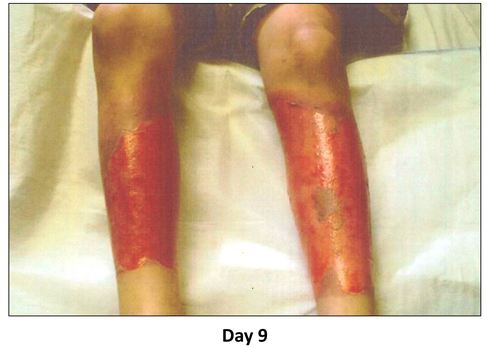
6 y/o male, 12% TBSA fire burn to both legs

- Silver sulfadiazine used 2x daily initially for 2 days
- Child uncooperative with clinicians due to extreme pain
- Pain medications 4x/day

POST ALTRAZEAL

- Wound healed in 9 days
- Single application of Altrazeal
- Pain subsided from 8.5/10 to 1/10 (-77%)

Day 2: Before Altrazeal



Day 9