

Management of chronic heel wound in a teen with self-injurious behaviors, Soto Syndrome, and Autism Spectrum Disorder



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Self-injurious Behavior and Autism Spectrum Disorder

- Self-injurious behaviors (SIBs) are behaviors that are often highly repetitive, rhythmic and may result in harm to the individual displaying the behavior. 30% of children with Autism Spectrum Disorder (ASD) engage in SIB.
- The severity of autism is a significant predictor of SIB. SIB has significant morbidity and requires early intervention to prevent long term disability.

Patient History

- The patient is a 12-year-old girl diagnosed with ASD, Soto Syndrome, and Intellectual Disability. She was legally blind due to SIB to eye resulting in bilateral retinal detachments due to trauma. She admitted from an acute care facility to our specialized neurobehavioral unit to address problem behaviors.
- Upon admission, she was noted to engage in SIB by striking her right heel on the floor. Behavioral management of patient included positioning and blocking of leg. There were initially no triggers for heel striking behavior.
- Despite attempts to prevent stomping and striking her heel, a wound developed approximately 3 months into the admission.



Initial injury

Treatment of Wound

- Persistent serosanguinous drainage was noted. Frequent dressing changes by nursing staff were required.
- Treatment included chemical debridement, packing with dry gauze and Mesalt ribbon, Aquacel AG, and Mepilex.
- She had 1:1 behavioral staff continually at her side to block behaviors. Bath times and transitions became more triggering for stomping.



Pre-op

Surgical Intervention

- Due to continued evolution of the wound, including tunneling, consultation with pediatric orthopedic surgery at Johns Hopkins was obtained. Operative debridement was performed.
- Patient was placed in a long leg cast with a window for dressing changes.



- The foot was positioned in 30% dorsiflexion to ensure the patient could not strike her heel.



Post-op Day 15

- The cast was changed twice due to soiling from incontinence.
- Daily dressing changes continued with behavioral support.

Outcome

- Cast remained in place until post-op day 55. Patient was discharged to a residential facility on post-op day 62.



Post-op Day 62

Discussion

- Successful management of a complex wound in a patient with severe SIB can be achieved using a multi-disciplinary approach including medicine, nursing, surgery, and behavioral specialists.

References

- Malhi, P., Sankhyan, N. Intentional Self Harm in Children with Autism. Indian J Pediatr 2021: 88, 158–160
- Minshawi NF, Hurwitz S, Fodstad JC, Biebl B, Morriss DH, McDougale CJ. The association between self-injurious behaviors and autism spectrum disorders, Psych Research Behav Mgmt, 2014: 7, 1.
- Shkedy G, Shkedy D, & Sandoval-Norton AH. Treating self-injurious behaviors in autism spectrum disorder, Cogent Psychology, 2019: 6:1