# ACADEMY OF SPINAL CORD INJURY PROFESSIONALS



### Importance of interdisciplinary team approach in management of pressure injuries in a veteran with spinal cord injury: a case report.

Lindy Gunawan, D.O.<sup>1,3</sup>, Beverly Hon, M.D.<sup>2,3</sup> <sup>1</sup>Kessler Institution for Rehabilitation, West Orange, New Jersey; <sup>2</sup>East Orange VA Medical Center, New Jersey; <sup>3</sup>Rutgers New Jersey Medical School, Department of Physical Medicine and Rehabilitation

## Kessier INSTITUTE FOR REHABILITATION

Select Medical

#### Learning Objectives

- Discuss the importance of interdisciplinary approach in the management of pressure injuries
- List the different disciplines that should be involved in management of pressure injuries
- Recognize non-surgical interventions that can optimize healing of pressure injuries

#### Background

The incidence of pressure injuries (PI) in patients with spinal cord injuries are 50-80%. In chronic SCI, 25% of wounds are stage 3 or stage 4. PI is also the second most common secondary complications in chronic SCI. PI increases morbidity and mortality in patients with SCI. The etiology is often multifactorial; therefore, its management requires individualized education and an interdisciplinary approach.

#### **Case Description**

53-year-old African American male veteran with history of DMT2, depression, chronic paraplegia from GSW and severe stage 4 sacral wound who presented to his local hospital for fever, chills and 50 lbs. weight loss. He had a foul-smelling sacral decubitus ulcer measured at 9cmx8.5cmx4cm with exposed bone, macerated edges, slough, necrotic tissue, malodourous and purulent drainage. CT showed sacral osteomyelitis with communicating tracts extending to his spine and multiple air pockets surrounding the sacrum and coccyx.

Evaluation by general, orthopedic, and plastic surgeries deemed his wound inoperable. It was communicated to the veteran that he had a poor prognosis. He changed his code status to DNR/DNI and quit his job.

- 4/2022: Admitted to local hospital, Stage 4 sacral wound measured at 9.0x8.5x4.0 cm.
- 5/2022: Wound measured 10.0x6.0x5.0 cm with 4 cm tunneling. Multiple specialties deemed wound inoperable. Patient requested change of code status to DNR/DNI.
- 5/23/2022: Transfer to East Orange VA (EOVA) SCI/D unit and initiation of aggressive interdisciplinary wound care management.
- 6/2022: Wound measured 8.0X4.0X4.5 cm with 5 cm undermining.
- 7/2022: Discharge from EOVA with wound measured 8.0x4.0x3.5 cm with 3 cm undermining with healthy granulation.
- 8/2022: Outpatient follow up wound measured 6.5x1.5x2.6 cm.
- 1/2023: Wound measured **0.8x0.6x0.8 cm** with 1.3 cm undermining.

#### Conclusion

Timeline

This case illustrates the importance of a specialized spinal cord injury center and the interdisciplinary approach in the management of severe pressure injuries in patients with chronic spinal cord injury.



(Figures obtained from National Pressure Injury Advisory Panel)

After his transfer to East Orange VA SCI/D unit, an interdisciplinary approach was enacted and included evaluations by SCI physician, wound care specialist, PT, OT, and nutritionist. Aggressive wound care management included initial bed rest, twice a day dressing changes, pressure mapping, specialized mattress, diabetic management and nutritional supplementation. At discharge, his wound had improved to 8cmx4cmx3.5cm with healthy aranulation.

He was discharged home with a wound vac,

specialized nursing care 3 times a week, new pressure mapped cushion, and specialized mattress. Veteran also learned how to perform rescue dressing changes independently. Medical sign out was given to veteran's local VA to ensure close follow-up. It was noted that as of January 2023 his wound size had significantly improved to 0.8cmx0.6cmx0.8cm.

#### **References:**

Garber, S. (2014). Pressure ulcer prevention and treatment following spinal cord injury: A clinical practice guideline for health-care providers (Second ed.). Washington, DC: Consortium for Spinal Cord Medicine.

Kirshblum, S., & Lin, V. W. (2019). Medical Management of Pressure Injuries in Patients with Spinal Cord Disorders. In *Spinal Cord Medicine* (Third ed., pp. 516-543). Demos Medical, an imprint of Springer Publishing.

Vecin, N. M., & Gater, D. R. (2022). Pressure Injuries and Management after Spinal Cord Injury. Journal of personalized medicine, 12(7), 1130. <u>https://doi.org/10.3390/jom12071130</u>

Florindez L. I., Carlson M. E., Pyatak E., et al. (2020) A qualitative analysis of pressure injury development among medically underserved adults with spinal cord injury. *Disability and rehabilitation*. 2020;42(15):2093-2099. doi:10.1080/09638288.2018.1552328

Rosin, N. R., Tabibi, R. S., Trimbath, J. D., & Henzel, M. K. (2020). A Primary Care Provider's Guide to Prevention and Management of Pressure Injury and Skin Breakdown in People With Spinal Cord Injury. *Topics in spinal cord injury rehabilitation*, 26(3), 177–185. https://doi.org/10.46292/scj2603-177

EDUCATIONAL CONFERENCE & EXPO 2023 – September 2 – 6 | San Diego, CA