

Demographics, classification, treatment, and impairment of pain after spinal cord injury

Regional Spinal Cord
Injury Center of the
Delaware Valley NIDILRR-designated

MAGES
REHABILITATION

HOSPITAL

James J. Bresnahan, MD1[^]; Benjamin R. Scoblionko, MD¹, Ralph J. Marino, MD¹; Daniel Graves, PhD¹; Eugene Viscusi, MD²

1Department of Rehabilitation Medicine, Sidney Kimmel Medical College, Thomas Jefferson University, Philadelphia, Pennsylvania ² Department of Anesthesiology, Sidney Kimmel Medical College, Thomas Jefferson University, Philadelphia, Pennsylvania

Research Objectives:

• To better elucidate the demographics, types of pain, treatments, and degree of impairment on daily functions of pain in individuals with SCI.

Design

• A survey was distributed. There were 705 individuals queried on the initial email and 711 on the second email. There were 171 responses. The survey consisted of:

General demographics

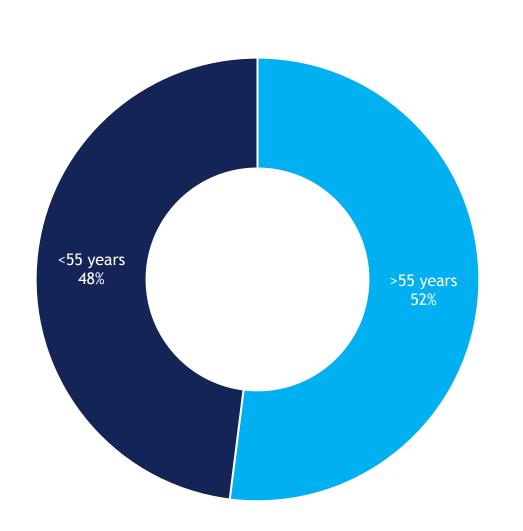
International Spinal Cord Injury Pain Data Set: Basic Form

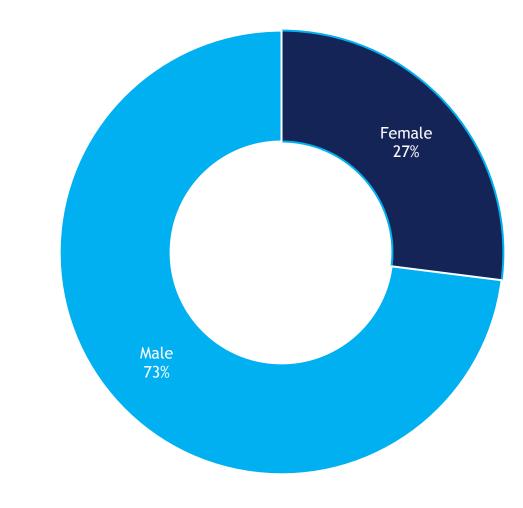
Spinal Cord Injury Pain Instrument (SCIPI)

PROMIS-Neuropathic 5a

PROMIS-Nociceptive 5a

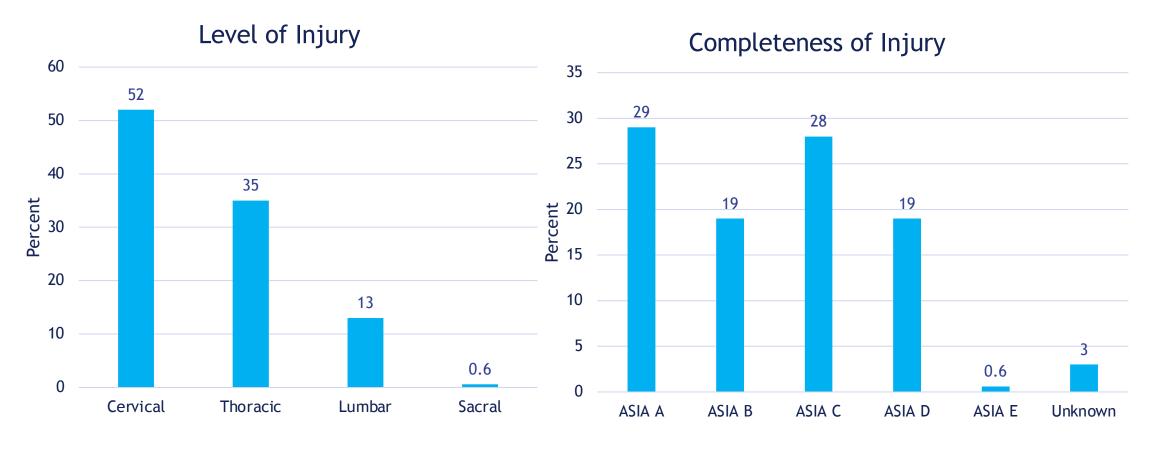
PROMIS-Pain Interference SF8a

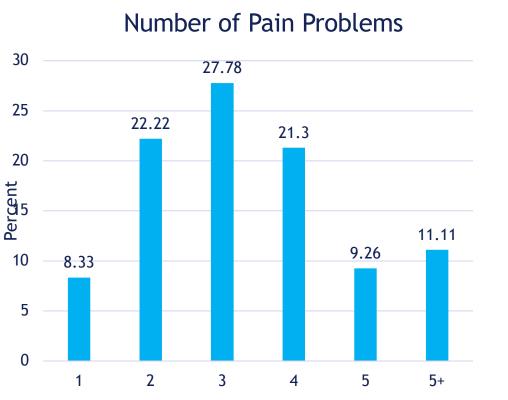




Demographics:

- 79% of individuals with SCI have chronic pain
- 86% with pain are classified as neuropathic
- Most common MOA: MVA (35%), Falls (30%)
- 12% due to penetrating injuries
- 82% >5 years from initial injury
- 55% have concomitant shoulder pain
- Age, sex, time since injury, LOI, COI, MOI, and employment had no impact on the development of neuropathic vs nociceptive pain profile (SCIPI)
- Females (p=0.04) and motor incomplete (p=0.06) injuries were more likely to have worse neuropathic pain
- Lumbar and sacral injuries were more likely to have worse nociceptive pain (p=0.05)







Life Interference:

- Those who recall having worse initial pain (>5/10) report higher current neuropathic pain (p=0.01), nociceptive pain (p=0.03), and life interference due to pain (p=0.01).
- Those >55 years in age had significantly more interference with household work, chores, things they do for fun, and family life due to pain (p=0.004 to p=0.04)
- As the number of painful areas in the body increases, life interference increases (p=0.01)
- Neuropathic pain more negatively impacts life enjoyment than nociceptive pain (p=0.04)

Treatments/Medications

- NSAIDs (58%), Cannabis (32%), Acetaminophen (30%), Gabapentin (27%), Opioids (24%) and Baclofen (24%) were the most commonly trialed medications
- Opioids followed by cannabis were noted to be the most helpful treatments
- Botulinum toxin injections helped spasticity (56%) but not pain in most (96%).

