

**Treating Low Voltage Electrical Injuries:  
Current Knowledge and Standard of Care for Burn Therapists  
within ABA Verified Burn Centers**

**Friday, November 9, 2018  
2:00 – 2:15 pm**

**Author and  
Co-authors:**

Jessica E. Willoughby, MOT; Heather S. Dodd, OTR/L; Sydney J. Thornton, OTR/L;  
Breanna Coleman, OTR/L; Bruce A. Cairns, MD  
University of North Carolina Health Care, North Carolina Jaycee Burn Center,  
Chapel Hill, NC

**Objective:**

Upon completion of the lecture, attendees should be better prepared to:

- Identify various sequela experienced by individuals who have sustained low voltage EIs
- Discuss common trends, assessments, and interventions used among burn therapists within ABA verified burn centers
- Review and explore best practice for providing care of individuals who are experiencing low voltage EI sequela

**Abstract:**

**Introduction:** Burn therapists may be challenged with assessing and treating patients who have sustained an electrical injury (EI) because of the array of symptoms and associated sequela. An EI can be as simple as a superficial contact point or as complicated as multi-organ failure. Low voltage EIs can cause devastating neurological and/or neuropsychological deficits that appear months, or even years, following the injury. With the unique progression of EIs, it is important to fully understand their process, as well as any possible consequences. Understanding these injuries and possible side effects will help burn therapists provide optimal care, including assessments, interventions, and education to their patients during all phases of recovery. This study specifically examines sequela of low voltage EIs. There is a lack of understanding as far as education and standard of care are concerned, due to minimal evidence of physical assault on the body. Despite this, research has shown following a low voltage EI that there is typically a decline in the patient's prior level of function, and an increase in neurological, physiological, and musculoskeletal sequela. This research aims to establish a concise understanding of EI sequela and the therapy standard of care required to treat these particular patients.

**Methods:** The inclusion criteria included: a) Licensed Burn Therapists (OT/PT) within burn centers verified by the ABA, b) Individuals who are literate in the English language. Participants that were excluded consisted of a) Non-burn therapist healthcare professionals, b) Therapists working at centers non-verified by the ABA, c) Individuals illiterate in the English language. An electronic survey was administered that analyzed burn therapists' competency of low voltage EIs as well as their current assessments and interventions when treating these sequela. Survey questions included basic demographic information, depth of competency of low voltage EI sequela, and frequently utilized assessments and interventions throughout all phases of rehabilitation.

**Results:** Research in progress at time of submission

**Conclusion:** Research in progress at time of submission

**Disclosure:**

Jessica E. Willoughby – No Relevant Financial Relationships to Disclose

Heather S. Dodd – No Relevant Financial Relationships to Disclose

Sydney J. Thornton – No Relevant Financial Relationships to Disclose

Breanna Coleman – No Relevant Financial Relationships to Disclose

Bruce A. Cairns – No Relevant Financial Relationships to Disclose