



This review aims to present a case series on pressure injury (PI) formation secondary to limb-splinting for preservation of peripheral intravascular catheter (PIVC) access in neonatal and pediatric patients” Sweeney et al (2018).

Abstract:

**Aim:** This review aims to present a case series on pressure injury (PI) formation secondary to limb-splinting for preservation of peripheral intravascular catheter (PIVC) access in neonatal and pediatric patients. A literature review was undertaken to analyze the existing knowledge base on this phenomenon.

**Background:** Medical devices and attachments are considered a risk factor for PI development in neonates, infants, and children. Three cases of PI formation caused by contact with limb boards used to preserve PIVC access were identified in an Australian tertiary pediatric facility during 2016.

**Methods:** A literature search was conducted during December 2017 using the Cumulative Index of Nursing and Allied Health, Excerpta Medica database, MEDLINE, PubMed, and the Cochrane Library. Keywords used were pressure injury(ies), pressure ulcer, pressure ulcers, decubitus ulcer, and decubitus ulcers. Articles were excluded if published before 2006, patients were adolescents or adults, and if injuries were not caused by PIVC-associated limb-splinting. Patients included in the case series were identified through screening of admissions

in one ward of a tertiary paediatric hospital.

Results: Five low-quality studies were included in the literature review. Three children were included in the case series. Each child acquired a PI subsequent to limb-splinting and taping adjacent to a PIVC. Hydration, nutritional state, and oxygenation did not appear to contribute to PI development in these cases.

Conclusions: There is a gap in the evidence base pertaining to PIVC splinting and its involvement with PI formation in neonates, infants, and children. The existing literature provides low-quality evidence this problem exists; thus, further research is recommended.

#### Reference:

Sweeney, K.A., Cogill, K., Davis, K. and Jauncey-Cooke, J.I. (2018) Neonatal and Pediatric Pressure Injuries Secondary to Limb Splinting for Intravascular Access: Case Series and Literature Review. *Journal of the Association for Vascular Access*. 23(2), p.108-116.

DOI: <https://doi.org/10.1016/j.java.2018.04.001>

