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## Neonatal Brachial Plexopathy management: Perspectives and update

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**Statement of the Problem:** Neonatal Brachial Plexopathy is a diagnosis that has presented as a clinical paradigm over the years. Although many advances have been made in the management of Neonatal Brachial Plexopathy patients; there are differences in what is the optimal approach to care. These differences involve what is the optimal timing for surgical intervention. Without early assessment and a team approach to diagnosis and management, infants can be at risk for incomplete recovery with various sequelae affecting the arm. The purpose of this presentation to review up to date approaches to Neonatal Brachial Plexopathy care based on current literature from a rehabilitation perspective.

**Methodology & Theoretical Orientation:** A review of current literature on Neonatal Brachial Plexopathy will be discussed. This review will include a review of the anatomy, etiology, diagnostic work up, surgical consideration, and rehabilitation management. Special emphasis will be given on rehabilitation's role in the management of this population.

**Findings:** At the end of this session participants will be able to 1) Recognize presenting signs and symptoms of Neonatal Brachial Plexopathy 2) Incorporate common standardized brachial plexus tools for assessment 3) Gain knowledge of rehabilitation strategies used to manage brachial plexus injuries.

Conclusion & Significance: Neonatal Brachial Plexus injuries can be effectively managed with appropriate early referrals. They are best managed in multidisciplinary specialty centers. Rehabilitation specialists have an essential role in optimizing outcomes of these patients in the multidisciplinary setting.

#### References

- Collier T, Woodbury SL, Gelfius CD. Electrodiagnostic Testing in the Pediatric Patient. In: Mitra R. eds. Principles of Rehabilitation Medicine. New York. NY: McGraw-Hill; 2019:1142-1154.
- Woodbury, S, Collier, T. Peripheral Nerve Disorders and Anterior Horn Cell Diseases In: Cline MW ed. Rudolph's Pediatrics, 23rd Edition. New York, NY: McGraw Hill; 2018: 2718-2723.
- 3. Castillo C, Ostermaier K, Fremion E, Collier T. Urologic self-management through intermittent self-catheterization among individuals with spina bifida: A journey to self-efficacy and autonomy. J of Pediatr Rehabil Med. 2017 Dec 11; 10(3-4):219-226.
- Collier T, Nguyen G, Hillebrand M. Pediatric Acquired Upper and Lower Limb Deficiency, PM&R Knowledge Now (online article update). (www.aapmr.org).
- Agarwal S, Potocki L, Collier, T, Woodbury L, Adesina A, Jones J, Lotze T. Utility of whole exome sequencing in evaluation of juvenile motor neuron disease. Muscle & Nerve. 2016 Apr; 53(4):648-652.

#### **Biography**

Talia Collier joined the UT Southwestern faculty in April 2022 as an Associate Professor in the Department of Physical Medicine and Rehabilitation (PM&R). She completed medical school at the University of Louisville. She completed PM&R residency at Emory University and completed her Pediatric Rehabilitation Fellowship at Children's Mercy Hospital in Kansas City. She is board certified in Pediatric Rehabilitation, Physical Medicine and Rehabilitation, and Electrodiagnostic Medicine. She served as a Pediatric Rehabilitation specialist at Sidra Medicine in Doha, Qatar from 2019 to 2021. Prior to her work in Qatar, she served as Assistant Professor at Texas Children's Hospital/Baylor College of Medicine in Houston, Texas for 7.5 years. Her clinical interests include Cerebral Palsy, Spina Biffda, Brachial Plexus Injury, Electrodiagnosis, and Limb Deficiency in pediatric patients. She also will continue volunteer work in global healthcare settings.

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