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How Do PTs and Pediatricians Assess the Needs of Infants With Torticollis?

What is this research about?

Infants with torticollis have an abnormal or crooked head or neck position, due to:

- Congenital muscular torticollis (CMT): at birth, a shortened muscle that connects the shoulder bones with the neck and middle skull region.
- Postural torticollis (PoT): a limited range of motion (ROM) in the neck, leading to a head tilt, or plagiocephaly.

Doctors make conservative choices to treat infants with torticollis to avoid harmful long term effects. Treatment options also vary for each case. This is true whether it is a pediatrician or a physical therapist (PT) that provides care for the infant. What common factors influence torticollis treatments by pediatricians and PTs?

What did the researchers do?

First, the researchers focused on registered pediatricians with the Association des Pédiatres du Québec, in Montreal. They targeted pediatricians who assessed new infants and referred them to PTs 10 times in the past year. In total, 18 participants completed a questionnaire. Their answers were reviewed and coded using content analysis to create a list of factors that shaped their practice.

What you need to know:

Family-centered assessments are needed to intervene for infants with torticollis. Thus, health care providers can address all areas in the ICF-CY that will impact treatment.

Second, PTs were recruited for 2 focus groups through purposeful sampling at 2 pediatric teaching hospitals in Montreal. They were eligible if they had assessed and treated infants with torticollis in the past 2 years, with at least 3 cases per week in the past year. There were 12 participants overall. They answered questions on the factors that influenced their clinical choices for infants with torticollis. Their responses were recorded, transcribed, and coded to re-enforce common points and add new codes.

Finally, 45 pediatric PTs were recruited for an online survey through various strategies. This included PTs that had assessed at least 10 infants with torticollis, and excluded those who worked in the same hospitals as survey and focus group participants. They answered survey questions on choice of interventions. The survey results were used to validate the findings from the first and second phase of the study. The overall findings were grouped under categories from the World Health Organization International Classification of Functioning, Disability and Health- Children and Youth (ICF-CY).

What did the researchers find?

Pediatricians reported a high rate of referrals to physiotherapy for infants with torticollis. Almost half of the pediatricians attempted to intervene on their own by giving advice on positions and passive stretches for infant neck muscles. But they felt the need to refer to a PT after 2 weeks to 2 months. Their choices to refer infants were affected by physical traits like neck ROM limits, parental concerns, and access to resources. They focused on fewer factors with their clinical choices due to time limits in their practice.

Pediatric PTs shared their clinical reasoning process for infants with torticollis. First, they used differential diagnosis to confirm whether the infant had CMT or PoT. Second, they decided on the amount of home exercise and direct PT intervention needed. This included intervening, parent education, and monitoring. The 5 most important factors that affected their clinical decisions were: ROM and severity of torticollis; age at presentation; parental ability to perform the exercises; plagiocephaly (malformed skull); and gross motor skills. Personal and environmental factors played a major role in the decisions of PTs, but no formal assessment tools were used.

How can you use this research?

Families of infants with torticollis may use this research to support their child's treatment. It highlights the importance of a family-centered care model. It also notes the impact that parental involvement and an infant's environment can have on better health outcomes.

Clinicians in pediatrics or physical therapy may review their current practice with torticollis. It may help to address assessment gaps for infants with torticollis.

Researchers may seek accurate tools to measure family and environmental factors that impact infants with torticollis.

About the Researchers

Isabelle Gagnon is Assistant Professor at the School of Physical and Occupational Therapy, and a physiotherapist at Montreal Children's Hospital, McGill University.

isabelle.gagnon8@mcgill.ca

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Decision making, Determination of health care needs, Patient-centered care, Physical therapy, Physicians, referral, Torticollis

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KT@neurodevnet.ca

