

The Incidence of Positional Plagiocephaly: A Cohort Study

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Abstract

OBJECTIVE: The objective of this study was to estimate the incidence of positional plagiocephaly in infants 7 to 12 weeks of age who attend the 2-month well-child clinic in Calgary, Alberta, Canada.

METHODS: A prospective cohort design was used to recruit 440 healthy full-term infants (born at ≥ 37 weeks of gestation) who presented at 2-month well-child clinics for public health nursing services (eg, immunization) in the city of Calgary, Alberta. The study was completed in 4 community health centers (CHCs) from July to September 2010. The CHCs were selected based on their location, each CHC representing 1 quadrant of the city. Argenta's (2004) plagiocephaly assessment tool was used to identify the presence or absence of plagiocephaly.

RESULTS: Of the 440 infants assessed, 205 were observed to have some form of plagiocephaly. The incidence of plagiocephaly in infants at 7 to 12 weeks of age was estimated to be 46.6%. Of all infants with plagiocephaly, 63.2% were affected on the right side and 78.3% had a mild form.

CONCLUSIONS: To our knowledge, this is the first population-based study to investigate the incidence of positional plagiocephaly using 4 community-based data collection sites. Future studies are required to corroborate the findings of our study. Research is required to assess the incidence of plagiocephaly using Argenta's plagiocephaly assessment tool across more CHCs and to assess prevalence at different infant age groups. The utility of using Argenta's plagiocephaly assessment tool by public health nurses and/or family physicians needs to be established.