

Torticollis and Positional Plagiocephaly: The Need for Early Intervention

By Kati Knudsen, PT,PCS

Typical presentation of torticollis includes lateral flexion of the neck to one side and rotation to the opposite side caused by shortening of the sternocleidomastoid muscle. Torticollis may be congenital or acquired due to intrauterine positioning, ocular muscle imbalanceⁱ or positional plagiocephaly.ⁱⁱ Once considered by some to be merely cosmetic, torticollis is now known to coincide with abnormal tone and motor delays.ⁱⁱⁱ Early physical therapy has been shown to improve torticollis outcomes and decrease the duration of therapy^{iv}, especially when therapy is started prior to 2 months of age.^v

Torticollis has been reported in up to 16% of newborns and treatment involves [tummy time](#) and stretching with physical therapy.^{vi} While the Back-to-Sleep campaign has been instrumental in combating SIDS, it has led to an increase in torticollis and plagiocephaly.^{vii} Prevention of torticollis and plagiocephaly includes frequent [tummy time](#) beginning early in infancy.^{viii, ix} Educating parents of infants prior to one month of age about the need for position changes is essential to the prevention of plagiocephaly and torticollis.^{x, xi}

Developmental delays have been identified in infants with torticollis and plagiocephaly in a study, these infants were also shown to benefit from physical therapy.^{xii} At Providence Neurodevelopmental Center for Children (PNCC,) of 79 patients seen with a diagnosis of torticollis in 2009, 52% demonstrated developmental delay and 32% demonstrated abnormal tone. The average age of referral for these patients was four months. According to Dr Martine Sacks, PNCC developmental pediatrician, there is legitimate concern for delayed motor development in infants with torticollis and plagiocephaly. “The issue is many kids who come to us with torticollis actually have developmental and/or neurological abnormalities. [And] retro-respectively, many children who show up with developmental issues at ages 3-8 had or were treated for torticollis.”

It is important to identify babies with positional preferences or deficits in cervical range of motion as early as possible as they may lead to plagiocephaly and/or torticollis.^{xiii} Promoting a variety of positions for play will help to support normal range of motion, skull shaping and motor development. When plagiocephaly is present, physical therapy has been shown to help reduce skull deformities.^{xiv, xv} The concern with plagiocephaly and torticollis is then much greater than merely a cosmetic issue. Early referral to physical therapy can lead to improved outcomes with motor skills and skull molding and can decrease the need for therapy services later in life.

For more information on torticollis and plagiocephaly or to refer a patient for physical therapy, please contact Providence Neurodevelopmental Center for Children.

Kati Knudsen, PT, PCS is a physical therapist and APTA board-certified pediatric clinical specialist with 14 years of clinical experience in pediatrics and at PNCC.

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