# Critical Review: Evidence for Residual Long-Term Speech Deficits Following Transient Cerebellar Mutism in Childhood

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This critical review examines the available evidence for residual long-term speech deficits following transient cerebellar mutism in childhood. Study designs include: parental survey, retrospective chart review, between group design, and case studies (3). Overall, the research supports the presence of residual speech deficits (articulation, fluency, phonology, rate of

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#### Methods

### **Search Strategy**

Computerized databases, including Commdis Dome, CINAHL, Pubmed, and Medline, were searched using the following search strategy:

((transient cerebellar mutism) OR (posterior fossa syndrome) OR (cerebellar syndrome) OR (mutism)) AND (dysarthria) AND ((tumour resection)) OR (tumor resection)).

The reference lists of the articles found were also searched for relevant papers.

The search was limited to articles written in English.

#### Search Criteria

Studies selected for inclusion in this review were required to investigate speech characteristics, involve individSturi0129()-3-2.64358(c)a0.353656(n)-7.00239raorrebellar mui0739(u)5.06907(r)-5.0012(ti)-11.7149. osected f5.07055(c)-2.64358(c)a0.353656(n)-7.00239raorrebellar mui0739(u)5.06907(r)-5.0012(ti)-11.7149.

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and nine months post-surgery, the second individual was described as presenting with some phoneme prolongations, pitch breaks, variable pitch, lack of volume control, explosive onsets, and six of the ten ataxic dysarthria features including imprecise consonants, excess and equal stress, harsh voice, prolonged phonemes, prolonged intervals, and slow rate.

Di Cataldo, Dollo, Astuto, La Spina, Ippolito, and Papotto (2001) provided the case of two individuals who at 25 and 34 months after surgery for the removal of a cerebellar tumour were reported to have normal speech following TCM. No formal assessment was completed.

In 1996, Jones, Kirollos, and Van Hille described the case of an individual who underwent cerebellar tumour resection and developed TCM

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- 6. Obtain speech samples in more natural communication settings where interactions are more spontaneous and representative of daily speech and not dependent on the task at hand (story telling).

  7. Use diagnostic tools which were developed