

Speech and Language Disorders Associated With 7q31 Deletions Implicating *FOXP2*

Key terms

7q31 deletions, *FOXP2*, childhood apraxia of speech, speech, language, communication

What this research is about



The *FOXP2* gene is important for speech and language development. 7q31 deletions affect the *FOXP2* gene. Speech and language difficulties are common in individuals with 7q31 deletions. However, speech and language had not been researched in a group of people with 7q31 deletions.

We wanted to understand the speech and language features, support needs and strengths in people with 7q31 deletions.

This research helps us to better understand 7q31 deletions. This study also improves our understanding of what therapies and supports might be helpful for individuals.

What the researchers did



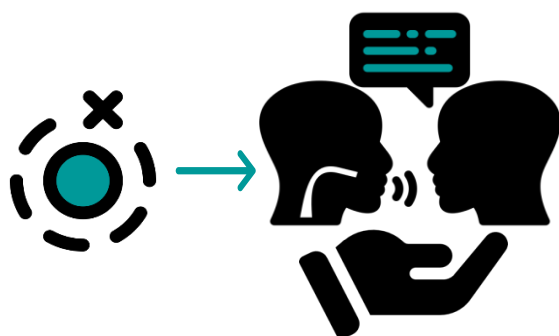
- 8 people with 7q31 deletions took part
- Online surveys assessed health and development, feeding, adaptive behaviour and communication.
- Speech was assessed via an online video call.

What the researchers found



- People who were speaking had a speech disorder called **childhood apraxia of speech (CAS)**.
- Language skills ranged from mild to severely impaired. People with smaller 7q31 deletions had better language skills.
- Some people used **augmentative and alternative communication** (AAC, e.g., communication aids, key word sign).
- **Speech and language milestones** were delayed. People with larger deletions may not learn to speak.
- People also often had **other diagnoses**, like intellectual disability, autism spectrum disorder, low muscle tone, sleep disturbances, vision impairment, and motor difficulties.

What this means for people with 7q 31 deletions and their families



- Clinicians should be aware that speech and language difficulties are key features of 7q31 deletions.
- Clinicians should be aware that the size of an individual's 7q31 deletions impacts their speech and language skills.
- **Tailored speech and language therapies** are important to support speech and language skills, especially augmentative and alternative communication (AAC).

Learn more here: Morison, L. D., Braden, R., Amor, D. J., Morgan, A. T. (2025). Speech and Language Disorders Associated With 7q31 Deletions Implicating FOXP2. *American Journal of Medical Genetics Part A*. e64190. <https://doi.org/10.1002/ajmg.a.64190>