

Plastic and Maxillofacial Surgery

Cleft palate and speech

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Most children who have had a cleft palate repair will have speech which is normal or very close to normal.

A working palate is essential for the development of speech. When the palate is repaired, the aim is to close the gap in the roof of the mouth, to repair the muscles in the soft palate and to lengthen the muscular part of the palate as much as possible to enable it to close firmly against the back and sides of the throat during speech.

Developing communication

Communication development can be monitored from birth. The development of babbling is particularly important for babies with cleft palate as it helps the cleft team know how well the palate is working. Babies develop babbling between 6–8 months of age. Sometimes babies are seen by the speech pathologists during this period or a little later to help develop babbling. A baby with an unrepaired cleft palate should develop babbling using sounds such as m, n, y, w, e.g. yayaya, mamama. After surgical repair of the cleft palate, they should develop a large a wider range of speech sounds such as p, b, t, d, k, g so that babbling includes strings such as bababa, dadada etc. Words start to emerge around a baby's first birthday.

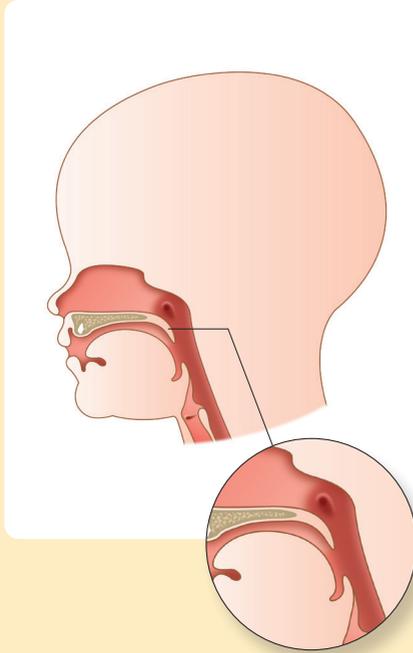
At The Royal Children's Hospital (RCH), a questionnaire about speech and language development is usually sent out at 12 months of age. If any concerns are identified, an assessment will be arranged. Otherwise, all patients will be seen by a speech pathologist at cleft clinic at around 18–24 months of age. By this time most children should have a number of recognisable words and a wide range of speech sounds. Their voice should not sound overly nasal. Routine speech reviews will be arranged every few years until growth has completed.

Some children may require speech therapy to help develop specific sounds, increase the number of words they are using and in older children develop grammar, sentences and literacy. Others with very nasal sounding voices may require further palate surgery in combination with ongoing speech therapy.

How does the palate work for speech?

The palate needs to alternate between these two positions:

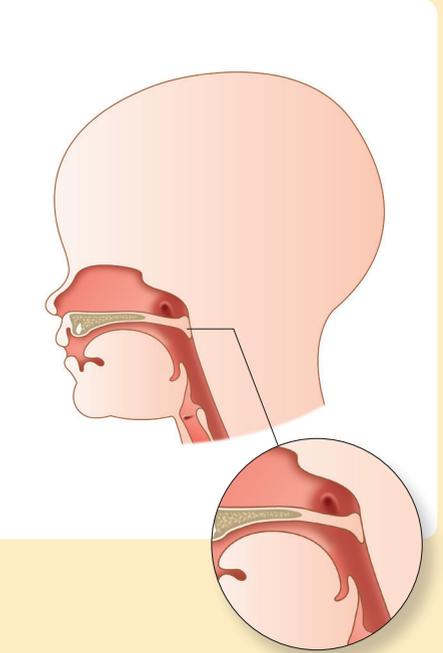
Palate in open position



In the open position, the palate muscles are relaxed and the air can pass into the nose and through the mouth. This enables the production of nasal consonants m, n and ng.

In the closed position, the palate shuts off tightly with the back and sides of the throat to make a seal, preventing air from entering the nose. This means that the

Palate in closed position



nose and mouth are completely separated and oral pressure can be built up in the mouth to produce all consonants apart from the nasal sounds (for example p, b, t, d, k, g, s, z, f, v, sh, ch, j). The ability to close off the nose from the mouth by the action of the muscles of the palate and pharynx is called velopharyngeal function. Velopharyngeal function is a basic requirement for clear, precise speech.

What happens if there are speech problems?

A speech pathologist will monitor your child's speech development through the Cleft Clinic.



Some children who have had their palate repaired will have velopharyngeal insufficiency (VPI). This occurs when the soft palate is not long enough to reach the back of the throat to make a firm seal allowing air to escape through the nose during speech. This makes it difficult for the child to make certain speech sounds, especially those that require the palate to be in the closed position. Speech may also be nasal and soft. Some children also develop speech sounds made in the nose or the throat which are not typical of their native language.

These 'cleft type' speech sounds can make the child difficult to understand and they will need speech therapy.

If there are any concerns regarding nasal speech, further tests may be required (see nasal speech fact sheet).

How can I support my child's speech development?

Talking with your baby is very important. You should respond to your child's early attempts to make sounds with praise and encouragement (see 'Early Communication and Babbling' fact sheet). Contact RCH Speech Pathology for more information. Telephone 9345 5540.

Hearing is an important component of speech development. You can support your child's speech development by ensuring that any hearing difficulties are addressed. If you have concerns regarding your child's speech development, please talk to a member of your cleft team.