

Cleft Care: Jaw distraction surgery

What is a jaw distraction?

Jaw distraction (also called mandibular distraction osteogenesis) is an operation used to slowly lengthen a small or recessed lower jaw.

A small jaw can cause the tongue to sit further back in the mouth. This can block the airway and make breathing more difficult, especially during sleep.

Jaw distraction gradually moves the jaw forward. As the jaw moves forward, the tongue also moves forward. This helps to:

- open the airway
- improve breathing
- support feeding and growth.

Why might my child need this surgery?

Some children are born with, or develop, a small lower jaw. Jaw distraction may be recommended if your child has:

- ongoing airway obstruction or obstructive sleep apnoea (OSA)
- a craniofacial condition (such as Robin Sequence (PRS) or Treacher Collins Syndrome)
- difficulty breathing during sleep or when unwell
- feeding or swallowing difficulties related to jaw position.

A small jaw can cause the tongue to fall backwards into the airway (this is called glossoptosis). This can partly or fully block airflow. Symptoms can range from:

- mild (snoring, restless sleep)
- to more serious breathing difficulties.

How does a jaw distraction work?

During surgery, small devices called distractors are placed into the jawbone. After surgery:

- the distractors are slowly turned each day
- this gently moves the jaw forward
- new bone forms in the gap as the jaw lengthens.

As the jaw moves forward, it also brings the tongue forward, which helps improve breathing. You will be shown how to turn the distractors before going home, and your team will guide you through this process.



When is this surgery considered?

Jaw distraction is usually only recommended when breathing problems are severe or ongoing. It may be considered when:

- breathing problems are confirmed on a sleep study
- other treatments have not worked or would be needed long term
- breathing difficulties are affecting your child's safety
- there is a need to avoid or remove a tracheostomy
- feeding or growth is affected by airway problems.

What treatments are tried before surgery?

Your team will usually try non-surgical options first, where possible. These may include:

- positioning strategies (especially in babies)
- a nasopharyngeal airway (NPA)
- CPAP (breathing support during sleep)
- feeding modifications.

Jaw distraction is not done for cosmetic reasons alone. The goal is to improve breathing and support your child's health and development.

What to expect after surgery

After surgery, your child will have distractor arms coming out from the skin:

- these will be visible during treatment
- they are carefully secured and safe to be in place
- the jaw is lengthened gradually over time
- it is common to see some swelling at first around the distractor sites
- turning the device may feel unusual, but it should not cause significant pain.

Treatment usually happens in two stages:

1. Distraction phase: when the device is turned to lengthen the jaw.
2. Consolidation phase: when the device stays in place while the new bone strengthens.

Your cleft team will guide you through each stage.

The distractors are temporary. Once the new bone has strengthened, your child will have another procedure to remove them. Your team will talk with you about the timing and what this involves.



Supporting your child

This can feel like a big step for families. It is normal to have questions or feel unsure at times.

Your team will:

- show you how to care for your child and the distractors
- support you with turning the device
- be available if you have concerns.

Your team is here to support you. If you are unsure about anything, please reach out.
Cleft Care team contacts

If you have any questions or concerns, please contact the cleft team for support.

Clinical nurse specialist

Phone: (08) 6456 8132

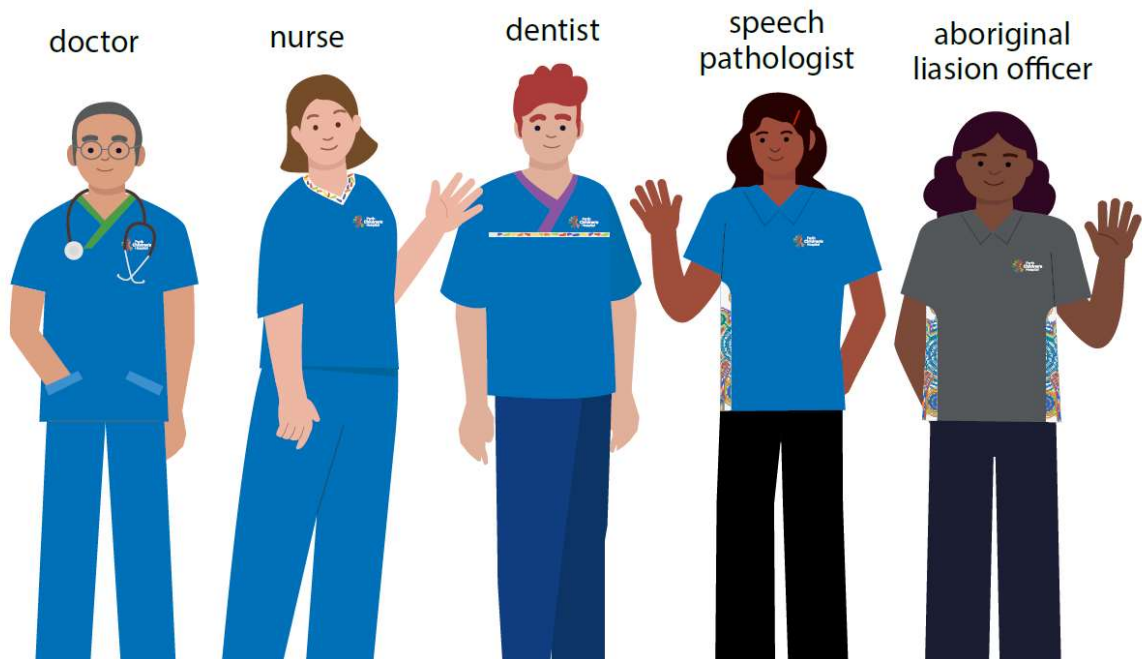
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