

# A longitudinal pilot study assessing the medical and surgical treatment of babies with congenital upper airway conditions.

ACTRN1262400007538

---

|            |                           |
|------------|---------------------------|
| Status     | RECRUITING                |
| Sponsor    | Perth Children's Hospital |
| Enrollment | 120 participants          |

## Plain Language Summary

---

Laryngomalacia is the most common breathing condition babies are born with — the soft tissue above the voice box is unusually floppy, causing a characteristic noisy, high-pitched breathing sound (stridor) especially when the baby is feeding or crying. In most babies it resolves on its own, but in severe cases, a surgical procedure called supraglottoplasty is needed to prevent feeding difficulties, poor weight gain, and dangerous drops in oxygen levels.

The challenge is that supraglottoplasty doesn't always work — around a third of cases don't improve enough after the procedure. Currently, it's difficult to predict which babies will benefit from surgery. This study will use continuous overnight pulse oximetry (a simple clip-on device that monitors oxygen saturation) before surgery to better understand the severity and patterns of oxygen drops, with the goal of identifying babies most likely to benefit from surgery.

Eligible participants are babies up to 6 months of age (or 6 months corrected age for premature babies) referred to the ENT team at Perth Children's Hospital for suspected laryngomalacia. Babies with chromosomal syndromes, neuromuscular conditions, or significant heart disease, or families without sufficient English for consent, are not eligible.

## Key Eligibility Criteria

---

### Inclusion (1)

- Patients up to 6 months of age/6 months corrected age (if born premature) who have been referred to the Ear, Nose and Throat (ENT) team at PCH for management of suspected laryngomalacia will be recruited.

### Exclusion (4)

- Children with any syndromic features or neuromuscular conditions
- Children with known significant cardiac disease
- Children unable to complete at-home oximetry
- Families without a sufficient level of English to be consented.

## Locations (1 total)

---

Perth Children's Hospital - Nedlands, WA, Australia