CONDITION

Facial nerve palsy due to birth trauma

Facial nerve palsy due to birth trauma is weakness on one side of a newborn's face caused by pressure or injury around delivery.

WHAT IT IS
Newborn facial weakness caused by pressure or injury during birth

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Uneven crying smile, facial droop, weak eyelid closure

WHAT CAUSES IT
Facial nerve compression or, rarely, tearing during birth

HOW IT IS DIAGNOSED
Newborn examination; nerve tests or imaging when atypical

MAIN TREATMENT
Eye protection, feeding support, and observation

CAN IT BE CURED?
Sometimes - compression injuries often heal; severe injuries may persist

IS IT AN EMERGENCY?
Sometimes - with breathing difficulty, seizures, or poor responsiveness

LONG-TERM OUTLOOK
Most recover within months; some facial weakness persists

Overview

Facial nerve palsy due to birth trauma is weakness or loss of movement on one side of a newborn's face. It happens when the facial nerve is compressed, stretched, or, rarely, torn around delivery.

The facial nerve controls closing the eyelid, raising the eyebrow, wrinkling the forehead, and moving the corner of the mouth. A baby may look symmetrical while resting, but one side of the mouth may move less during crying.

Most birth-related cases are temporary compression injuries. The nerve remains intact and gradually starts working as pressure and swelling settle. Recovery often occurs over weeks to a few months. Severe injuries are less common and may cause lasting weakness.

Facial asymmetry can also result from differences in muscle development, a condition affecting the brain or nerves, or a syndrome present from birth. A newborn examination is important to identify the likely cause and check for other concerns.

Symptoms

Signs are usually present at birth or noticed soon afterward. They most often affect one side of the face.

Possible signs include:

Weakness involving the forehead, eyelid, and mouth supports an injury to the facial nerve after it has left the brain.

Some babies have an uneven lower lip only when crying, while the forehead and eyelids move normally. This may be caused by an underdeveloped muscle at the corner of the mouth, sometimes called asymmetric crying facies. It is different from facial nerve palsy, although they can look similar.

If the eyelid does not close fully, the eye can become dry or irritated. Redness, cloudiness, increased watering, or discharge should be assessed promptly.

- One corner of the mouth moving less during crying
- A drooping or uneven mouth
- Difficulty closing one eyelid completely
- Less movement of the forehead or eyebrow
- A flatter fold between the nose and mouth
- Milk leaking from one side of the mouth
- Difficulty sealing around the breast or bottle

Causes and risk factors

The facial nerve passes through the skull and close to the surface near the ear and jaw. In a newborn, this exposed part can be pressed against the mother's pelvis or affected by pressure during delivery.

Forceps can put pressure near the nerve, but facial nerve palsy also occurs after deliveries without instruments.

Associated factors include:

These factors do not mean palsy will occur or prove that an instrument or delivery decision caused it. Sometimes no clear source of pressure is found.

Most birth-trauma palsies result from temporary compression. Serious stretching or tearing is uncommon.

Facial weakness unrelated to delivery may be associated with facial nerve development, a congenital or genetic condition, infection, or a problem involving the brain or brainstem. These causes are more likely when there are other physical differences, hearing concerns, weakness elsewhere, or no history suggesting birth pressure.

- A long or difficult labour
- A larger baby
- The baby's position during delivery
- Instrument-assisted delivery, particularly with forceps

Diagnosis

Diagnosis usually begins with a physical examination after birth. A clinician observes the baby's face while resting, crying, feeding, blinking, and closing the eyes. They assess whether the forehead, eyelid, and mouth are all affected.

The examination also checks muscle tone, limb movement, alertness, head and facial structure, hearing response, and the ability to suck and swallow. These checks can identify signs that point away from an isolated birth injury.

Most babies with a typical pattern and otherwise normal examination do not need tests. The timing, pattern of movement, and birth history are often enough for a clinical diagnosis.

Further assessment may be considered when:

Tests may include imaging of the brain, skull, or facial nerve. Electrical nerve and muscle tests may help assess severe or persistent weakness, but are not routinely needed.

- The cause is unclear
- Both sides of the face are affected
- Other nerves or parts of the body seem affected
- There are unusual facial or ear features
- Weakness is severe or does not begin to improve
- A nerve tear, brain condition, or developmental difference is suspected

Treatment and management

Many babies need observation and follow-up rather than active treatment. Follow-up checks monitor facial movement, eye closure, and feeding while a compressed nerve heals.

Protecting the eye is the main concern when the eyelid does not close completely. The care team may recommend lubricating drops or ointment and a safe way to keep the eyelid closed during sleep. This prevents the cornea, the clear front surface of the eye, from drying out or becoming injured.

Use eye products and eyelid taping only as instructed. Incorrect taping can irritate the skin or eye. An eye specialist may be involved if closure is poor or the eye becomes red.

Feeding support can help when weakness interferes with suction. A feeding or lactation specialist may suggest different positioning, support around the cheek, or another bottle or teat. The aim is safe feeding and adequate weight gain without exhaustion.

Corticosteroids are not established as routine treatment for a typical newborn compression injury. Facial exercises have not been shown to make an uncomplicated injury recover faster.

Surgery is rarely needed. A specialist may consider it if there is strong evidence that the nerve was severely disrupted or profound weakness continues without recovery. Decisions depend on the examination, progress, and specialist tests.

Complications

Most babies recover without lasting complications. Problems are more likely when weakness is severe, eye closure is poor, or the nerve has been seriously damaged.

Possible complications include:

Linked movements, called synkinesis, can occur when healing nerve fibres reconnect to different muscles. For example, the eye may narrow when the child smiles.

Persistent facial weakness does not necessarily affect intelligence, learning, or movement elsewhere. If other developmental concerns are present, clinicians investigate causes beyond an isolated facial nerve injury.

- Dryness, scratching, or ulceration of the cornea
- Feeding difficulty and slower weight gain
- Persistent facial weakness or asymmetry
- Tightness or linked facial movements during recovery

- Emotional or social effects if visible asymmetry continues into childhood

Prevention

Facial nerve palsy due to birth pressure cannot always be prevented. It may occur even when labour is managed appropriately and no instruments are used.

Maternity teams choose delivery methods by balancing the safety of the baby and the person giving birth. Avoiding a medically needed assisted delivery or caesarean birth solely to prevent this uncommon injury could create other risks.

Careful positioning and use of delivery instruments may reduce direct pressure but cannot eliminate every risk. Parents cannot make pregnancy changes that guarantee prevention. Conditions caused by how the facial nerve or muscles developed before birth are also not preventable through pregnancy behaviour.

Living with it and what to expect

With a mild compression injury, improvements may appear during the first days or weeks. The eyelid may close more fully, the mouth may become more even during crying, and feeding may get easier.

Recovery is often gradual, and different parts of the face may improve at different times. Occasional photographs or short videos during crying can help document progress, although daily comparisons may make slow changes difficult to notice.

Most recovery from a temporary birth injury occurs during the first few months. Timing varies, and a lack of immediate improvement does not mean the weakness will be permanent.

Routine follow-up may include checks of:

If weakness continues, referral to paediatric neurology, ear, nose and throat care, plastic surgery, physiotherapy, or ophthalmology may be appropriate. Later support can address eye safety, speech or eating concerns, facial movement, and confidence.

Some children have lasting asymmetry after a severe injury but can still lead active, healthy lives. Selected specialist procedures may improve eye protection, facial balance, or movement.

- Eye closure and eye health
- Feeding, hydration, and weight gain
- Changes in facial movement

- Hearing and development when indicated

When to get medical help

Facial weakness in a newborn should be reported promptly to the maternity or paediatric care team, even if the baby otherwise appears well. The eye, feeding, and nervous system need to be checked.

Seek prompt medical assessment if:

Call emergency services if the baby has trouble breathing, turns blue or very pale, has a seizure, is difficult to wake, becomes unusually floppy, or cannot feed because of choking or breathing problems. These signs are not typical of an isolated facial nerve compression and need immediate assessment.

- The baby cannot close one eye fully
- The eye is red, cloudy, swollen, or producing discharge
- Feeding is difficult, very slow, or repeatedly interrupted
- The baby has fewer wet nappies or is not gaining weight
- Facial weakness worsens or affects both sides
- There is no improvement within the follow-up period given
- New weakness or unusual movements develop elsewhere

Common questions

Will my baby's face return to normal?

Most babies with a compressed facial nerve regain normal or near-normal movement over weeks to months. Recovery is less certain if the nerve was severely stretched or torn. Progress during follow-up helps clarify the outlook.

Was the palsy caused by forceps?

Forceps can place pressure near the facial nerve, but palsy also occurs without them. The baby's position and pressure during labour may contribute. Facial palsy alone cannot show exactly how the injury happened.

Can my baby breastfeed with facial nerve palsy?

Many babies can breastfeed, although a weak mouth seal may cause leaking or difficulty

maintaining suction. Positioning support and help from a lactation or feeding specialist may help. Weight and hydration should be monitored.

Does facial nerve palsy affect the brain?

An isolated birth-related injury affects the nerve moving the facial muscles, not intelligence. However, facial weakness can occasionally indicate a condition involving the brain or other nerves. The newborn examination checks for this.

Should I massage or exercise my baby's face?

There is no clear evidence that massage or facial exercises speed recovery from a simple compression injury. Avoid forceful massage. If therapy is recommended for persistent weakness, a paediatric specialist should demonstrate safe techniques.

Can facial nerve palsy come back later?

A palsy caused by a one-time birth injury is not generally expected to return after recovery. New facial weakness later in childhood should be medically assessed because it may have a different cause.

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