

## Cleft Palate and Lip

During the second and third months of pregnancy, the tissues that form the lip and palate fuse together. In certain instances, however, the fusion does not take place or only partially. This leaves an opening in the lip and/or cleft.

### Cleft Lip

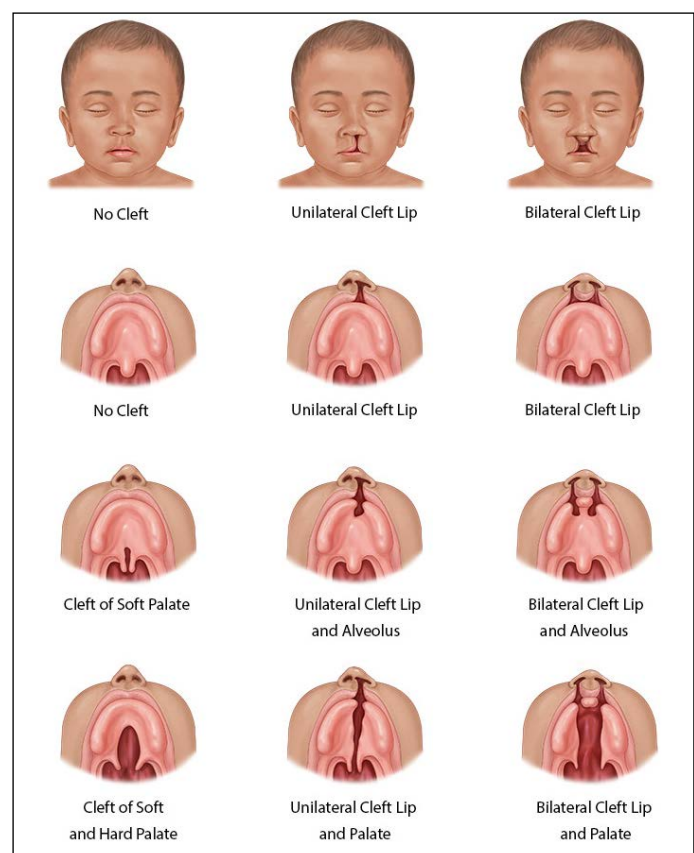
An unborn baby's lips form between the fourth and seventh weeks of pregnancy. A cleft lip occurs when the tissue that makes up the lips does not join completely before birth. This results in an opening in the upper lip. Such an opening in the lip can vary from a small slit to a large opening that goes through the lip into the nose. A cleft lip can occur on one or both sides of the lip or in the middle of the lip.

### Cleft Palate

An unborn baby's roof of the mouth (palate) is formed between the sixth and ninth weeks of pregnancy. A cleft palate occurs when the tissue that makes up the roof of the mouth does not join together completely during pregnancy. Only part of the palate can be involved and left open or both the front and the back parts of the palate are open. It is also possible that both a cleft lip and palate can occur on one or both sides of the mouth.

### Risk factors and causes of a cleft lip and/or palate

- Family history - couples with a family history of cleft lip or cleft palate face a higher risk of having a baby with a cleft. If the first born had a cleft lip or palate the risk that following siblings may also have a cleft lip or palate increases.
- Gender - males are twice as likely to have a cleft lip with or without a cleft palate. Cleft palate without cleft lip is however more common in females.
- Exposure to certain substances during pregnancy – the deformity may be more likely to occur in pregnant women who smoke cigarettes, drink alcohol or take certain medications.
- Obesity during pregnancy - some evidence indicates that babies born to obese women may have an increased risk of cleft lip and palate.



Unfortunately, a cleft lip and/or cleft palate also form part of more than four hundred syndromes (conditions) including Waardenburg, Pierre Robin, and Down's syndromes.

### How is a cleft lip and/or palate diagnosed?

The diagnosis of a cleft lip and/or palate is quite obvious at birth as all newborn babies are screened (assessed) fully to ensure that both the hard and soft palate is completely closed. Diagnosis prior to birth is possible as the malformation of the upper lip, nasal openings, and palate may be seen on the ultrasound. Since the malformation may be associated with other deformities and syndromes, specialised investigations may be recommended.

Other birth defects that may occur with a cleft lip and/or palate include:

- Common heart defects
- Narrowing of the stomach where it connects to the small intestine (pyloric stenosis)
- Club foot
- Complications caused by cleft lip and/or palate.

A cleft lip or palate may have some complications that include:

- Feeding problem – the abnormal split in the upper lip makes it difficult for the newborn to get a good seal during breastfeeding or routine nipples used in bottle feeding. Specialised bottles and nipple systems are available that will assist in effective feeding. Newborn babies with a cleft palate are fitted with a removable artificial palate very early. The artificial palate prevents the liquids from passing through the defect and into the nostrils. It also facilitates the ability to suck efficiently.
- Ear infections and hearing loss may occur as babies with a cleft palate have a higher risk of fluid accumulating inside the eardrum. These children may require myringotomy and tympanostomy tubes (grommets) to be fitted at an early age.
- Speech problems often occur due to the malformation's impact on the articulation of words. Although the corrective surgery may lessen the speech problem, most children will benefit from speech therapy.
- Dental problems occur quite often as children with the malformation frequently have issues with missing and malformed teeth. Orthodontic treatment and on certain occasions surgery to the upper jawbone (maxilla) may be required because a cleft sometimes involves the gums and jaw, affecting the proper growth of teeth, and alignment of the jaw

### How is a cleft lip and/or palate treated?

Unfortunately, the only treatment is surgical repair of the malformation. Multiple surgeries and long-term follow-ups are often necessary. As cleft lips and palates can interfere with physical, language and psychological development, treatment is recommended as early as possible. The first surgery to repair a cleft lip is usually done between 10 and 12 weeks of age. A cleft palate, however, is repaired/reconstructed through a procedure called palatoplasty, which is done between nine and 18 months. Additional surgeries are often needed to achieve the best results. In addition to surgery, the child may receive follow-up care from members of the multidisciplinary team on issues of speech, hearing, growth, dental, and psychological development.

Depending on the severity of the malformation, the surgical repairs may take place over several years and orthodontic treatment will only be provided where necessary.

### What must be funded under the Prescribed Minimum Benefits (PMB)?

Cleft lip and palate are PMB conditions under DTP code 901C and it refers to cleft palate and/or cleft lip without airway obstruction. The PMB regulations specify that the diagnosis, treatment and care of the PMB conditions must be funded in full providing that a designated service provider is used and that the treatment is not less than what would have been provided in the state sector.

The diagnosis done with the ultrasound as part of normal antenatal care is not included in the PMB care of pregnancy. In cases where the scan indicates a malformation of the upper lip or palate, the treating provider should provide medical motivation for further scanning.

Specialised investigations to exclude other malformations that may be related to the cleft lip or palate will however not be included under the PMBs.

The surgical repair of the malformation as well as future orthognathic surgery and orthodontic treatment is included in the PMB level of care as these services are all provided in the state sector.

It is important for the member and the treating doctor to confirm the medical scheme PMB cover in relation to the diagnosis, treatment and care of the condition.

### References:

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2. Mayo Clinic. 2022. Cleft lip and cleft palate - Symptoms and causes. [online] Available at: <<https://www.mayoclinic.org/diseases-conditions/cleft-palate/symptoms-causes/syc-20370985>> [Accessed 9 September 2022].
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