Other reasons for treating early

Other reasons for early orthodontic treatment of posterior crossbites may be:

- Preventing loss of arch length or space,
- Avoiding excessive wear of erupting permanent teeth,
- Improving jaw joint and muscular health,
- Improving tongue position, breathing and/or function.

Optimum stage to start treatment

Generally, the patient has reached optimum development for starting early phase treatment when the first permanent molars are fully erupted and all the permanent incisors have erupted or are erupting.

Reasons for not treating even earlier are:

- Some baby teeth crossbites correct naturally when the first permanent molars erupt, thus making early treatment unnecessary.
- Following baby molar crossbite correction, the permanent molars may still erupt into crossbite.
- Upper incisors may erupt into crossbite, or out of line, after a posterior crossbite has been corrected. It is better to correct all crossbites or malalignments in the one treatment instead of two successive early treatments.

If a patient presents with a crossbite before the best time to treat, periodic recall visits allow the orthodontist to monitor the child's development until either the crossbite has corrected naturally, or the child's development has reached the optimum stage for correction. After initial assessment, usually there are no charges for recall visits.

Treatment duration

Most early expansion treatment to correct a posterior crossbite is completed over a period of about 6 to 9 months.

The correction of the crossbite with an RME appliance is usually achieved in the first 2 to 3 months. Then, during the remainder of the time, the appliance is left in place for the very important retention phase.

After early treatment

Stability of crossbite correction

The majority of early posterior crossbite corrections remain stable. However, in patients who have a difference in natural growth of the upper and lower jaws, the crossbites tend to return as the patients continue to grow.

In some patients a re-narrowing of the palate can occur, despite the best of treatment.

Experience shows that roughly up to one third of all early expansions will require further expansion later. This may require a new expander, such as an RME appliance, or just some minor expansion with braces.

The need for treatment later

Fewer than 5% of patients who have early treatment grow to retain an ideal or very good occlusion and alignment of their teeth which does not require further treatment.

Therefore, most children who have early orthodontic treatment require comprehensive orthodontic treatment in their early teens, but not necessarily for the same problem as the one for which they were treated before.

NORTH SHORE
Orthodontics

5 Khartoum Avenue Gordon

Tel: 9418 1660
reception@northshoreorthodontics.com.au
www.northshoreorthodontics.com.au

Posterior crossbite
and its early orthodontic treatment

Posterior bite

Normal bite

Looking into a child's mouth from the front, in a normal bite the upper and lower molars on both sides close properly, with the upper molars overlapping the lower molars towards the outside.

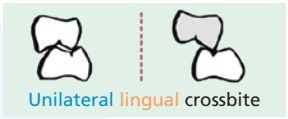

Normal bite

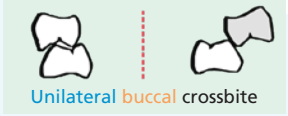
Crossbite types

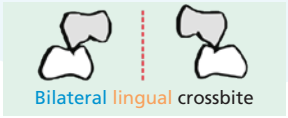
If on closing, the upper and lower molars do not meet properly sideways, they are said to be in crossbite.

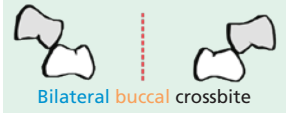
If the crossbite is only on one side of the mouth, it is called unilateral. When it is on both sides of the mouth, it is called bilateral.

A crossbite is called lingual when the upper molars close too far towards the inside of the mouth. When they close too far towards the outside, the crossbite is called buccal.


Unilateral lingual crossbite


Unilateral buccal crossbite


Bilateral lingual crossbite


Bilateral buccal crossbite

Causes of crossbite

Causes of posterior crossbite include[1]:

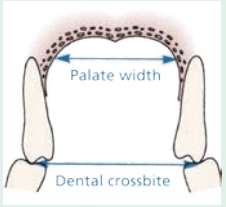
- Relative narrowness of upper jaw growth,
- Crowding of teeth,
- Thumb sucking, mouth breathing and tongue posture.
- Problems with the eruption of permanent teeth,
- Asymmetric jaw growth,
- Syndromes such as Cleft palate,
- Trauma.

[1] Overgrowing of the lower jaw - called "Class III pattern" - can cause various bite problems, including posterior crossbite. The information provided here does not relate to such crossbites.

Appliances used in treating crossbite

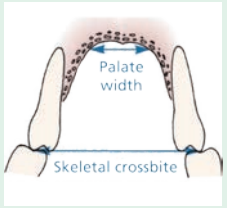
Dental and skeletal crossbites

Differences between dental and skeletal causes for posterior crossbites generally call for treatment with different orthodontic appliances.



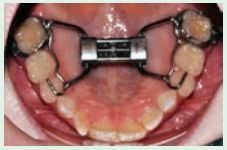
A dental crossbite requires realigning of the teeth.

This usually includes treatment to move the teeth with, for example, braces



A skeletal crossbite caused by a narrow upper jaw requires expansion.

This usually includes treatment with a Rapid Maxillary[2] Expansion (RME) appliance.



The RME appliance is used to widen the upper jaw - and therefore the palate. It is the most common appliance used in treating posterior crossbites.

Families sometimes ask for plates, assuming that these are easier and more comfortable for the child. However, the opposite is true. There are also other treatment options not detailed here.

[2] Maxilla = Upper jaw

Early treatment of crossbite

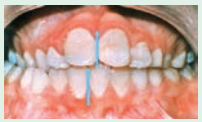
Why treat early?

The majority of children who will benefit from orthodontic treatment, start treatment when their adult teeth have emerged, usually around the age of 12 to 15.

However, most patients with a posterior crossbite require treatment when their facial bones are still very pliable, usually sometime between the ages of 7 and 10. At this stage, the child's teeth are still a mixture of baby and adult teeth.

Most common reason for treating early

Bilateral narrowness of the upper jaw is the most common cause of posterior crossbites. These skeletal crossbites can cause the lower jaw to slide sideways on closure - as illustrated.



If not treated early, such patients may grow asymmetrically with the lower jaw permanently displaced to one side. The resulting facial asymmetry and unilateral crossbite can then only be properly corrected with surgery.

Some patients with a sideways shift do not develop a facial asymmetry by age 13. For these patients, expansion at that later age may be as effective as at the age of 8. However, without early orthodontic treatment these patients are at risk of developing a facial asymmetry. The safe approach is therefore to treat these posterior crossbites early.

Treatment is by bilateral expansion of the upper jaw, usually with an RME appliance.