

Space Mainainers



Why do we need to maintain space in your child's mouth?

1. To provide space for erupting permanent teeth
2. To prevent teeth from drifting or tipping forward
3. To prevent crowding

Note: The best space maintainer is a well maintained primary tooth. But when these important natural space maintainers are lost, it is essential to implement a space management strategy.



Failure to maintain space may result in the following:

1. Drifting / tipping of teeth
2. Loss of arch length
3. Midline shift
4. Crowding of permanent teeth
5. Impactions
6. Orthodontic intervention including extractions

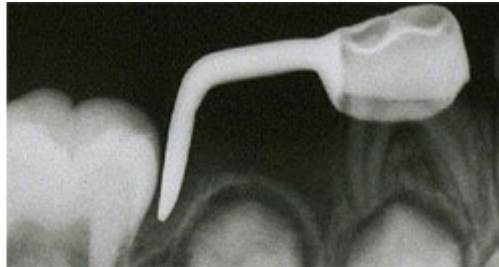
Unilateral Space Maintainers

These are placed just on one side of the mouth, usually "replacing" one tooth.



Crown w/ distal shoe

- **USE:** This is used to prevent first permanent molars from moving forward (mesially) with the early loss of second primary molars.
- **DESCRIPTION OF APPLIANCE:** The example shown below is a crown with an extension soldered to the crown. The extension is placed into the tissue against the unerupted first permanent molar. The extension, also called a distal shoe, is used when the second primary molars are lost before the eruption of the first permanent molars (i.e., very premature loss).
- **DURATION OF WEAR:** These are removed when the permanent tooth erupts in the space that was held by the appliance.



Crown and Bar



- **USE:** Early loss of a first primary molar often allows the second primary molar to tip and move forward (mesially). This appliance is used for holding the space for the erupting permanent tooth. (bicuspid)
- **DESCRIPTION OF APPLIANCE:** This appliance includes a crown on a primary molar with a band soldered onto it that rests against the canine or cuspid.
- **DURATION OF WEAR:** These are removed when the permanent tooth erupts in the space that was held by the appliance.

Bilateral Space Maintainers

These are usually cemented with orthodontic bands on the back 2 permanent molars on both sides (bilateral), connected by a soldered wire. This can only be placed when 6 year molars are fully erupted. In addition, this appliance helps with anterior teeth alignment because the wire rests against the inside of the lower incisors.

- **Nance Appliance**



- **USE:** The Nance Holding Arch is used in situations where premature bilateral loss of maxillary primary teeth has occurred.
- **DESCRIPTION OF APPLIANCE:** This type of space maintainer also is known as a Nance Holding Arch. Note the small acrylic button that rests against the roof of the mouth.
- **HYGIENE NOTE:** It is important that patients and parents be instructed to make sure that the patient meticulously flosses under the acrylic button, and brushes around the bands.

- **Lingual Arch**



- **USE:** This appliance can eliminate the need for two unilateral spacers. They are most useful if there is more than one tooth missing we want to prevent the lower incisors from tipping. Loss of second primary molar in the mandible (counterpart to Nance). Maintains the tooth space and the leeway space
- An altered form can incorporate a looped lingual arch to actually move the lower incisors forward (straighten them a little too) before maintaining them in a better position.
- **DESCRIPTION OF APPLIANCE:** The appliance is cemented on the two 6 year molars. There are adjustment loops in the wire (called activators) that can provide the following movements:
 - Anterior-posterior (front to back) arch length increase
 - Buccal (toward cheek) expansion
 - Distal (toward the back) molar movement
 - Molar torque or tip
 - Molar rotation

When is it time to remove the space maintainer?

- When the permanent tooth is erupted into the correct position.
- Usually around 1 year after initial placement of the appliance.

