

## Orthodontics and Orthopedic Intervention in the Comprehensive Care of Cleft Lip and Palate

Babies born with a cleft are more prone to develop challenges with mouth tissue regarding shape, structure, number, and position. Cleft lip and palate is a condition that might develop disabling malocclusions with potential for deterioration. There are interventions that can be performed to prevent or minorize these malocclusions.

### Presurgical Orthopedics

A diversity of active and passive devices such as plates and nasal conformers may help narrow the cleft by guiding the growth of the palatal processes to a more physiological position, allowing babies to feed properly. In addition, nasal conformers stimulate the tissue to improve the columella length, the shape of the nostril, and the position of the deviated septum to receive the primary surgery.



Before



After PSIO



After Surgery

## Mixed Dentition

Between 6-12 years old, it is necessary to monitor the growth of the patient's teeth and face by using expanders and a face mask when necessary to assure a balanced growth of the face bone structures. In addition, brackets may be placed to offer a proper shape of the maxillary alveolar arches in preparation to receive the alveolar bone graft.



## Permanent Dentition

Once all permanent teeth are visible in the mouth, brackets and other appliances can be placed to align the teeth in a horizontal, transversal and vertical plane to offer a functional and aesthetic bite. This treatment can also be provided to prepare the patient for a future orthognathic surgery when the maxillo-mandibular discrepancy requires it.



Dental Hygiene education should be provided on every stage of orthodontic treatment