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**EARLY ORTHODONTIC TREATMENT OF CHILDREN WITH CLEFT LIP
AND PALATE IN LEBANON**

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Cleft lip and/or palate is a congenital condition affecting the upper lip, alveolus, and/or palate, which can present unilaterally or bilaterally. Early orthodontic intervention plays a critical role in managing this condition, particularly before surgical repair.

In Lebanon, early treatment typically begins within the first few weeks of life and involves the use of pre-surgical orthopedic appliances to align the maxillary segments, reduce the cleft width, and improve nasal symmetry. These procedures aim to enhance the outcomes of future lip and palate surgeries. Historically, Lebanon began advancing cleft care in the 1990s with the development of multidisciplinary teams in hospitals such as the American University of Beirut Medical Center, Hotel Dieu de France, and Saint George Hospital. These teams include orthodontists, surgeons, speech therapists, and pediatricians who work collaboratively. Non-governmental organizations like Operation Smile Lebanon have also played an important role in expanding access to early treatment and surgical correction.

In terms of clinical practice, Lebanese orthodontists commonly use passive orthopedic plates, which are custom-made acrylic appliances placed in the infant's mouth to guide the growth of the maxilla without applying active force. Lip taping is often combined with these plates to gently approximate the cleft segments externally. In more advanced centers, nasoalveolar molding is used; this involves a combination of an intraoral molding plate and nasal stents to reshape both the cleft and the nostrils prior to lip surgery. Feeding obturators are also frequently used to help newborns with cleft palate feed properly. These orthopedic techniques are customized for the specific type of cleft, whether unilateral, bilateral, or involving only the hard palate.

The goal of early orthodontic care in Lebanon is not only to improve aesthetics and function but also to facilitate more effective and less traumatic surgical repair. With increased awareness, access to care, and the availability of trained specialists, Lebanon has made substantial progress in the early management of children born with cleft conditions.