molars to increase the vertical, allow normal full molar vertical eruption and decrease the need for orthodontic appliance treatment later. Composite bonding can match primary tooth colors so it is very patient friendly. Young patients quickly adjust to the vertical change, and remaining bonding on the primary teeth usually exfoliates months or years later when the baby teeth exfoliate.

When the first molars erupt, around 5–7 years of age, if a deep bite or closed vertical exists, dental composite bonding can be added to the primary first and/or primary second molars to increase the vertical. While lab-manufactured bonded ceramics and stainless steel crowns can be used to achieve the same effect, direct bonded composites work very well. Direct composite may last until the primary tooth exfoliates. It only needs to remain in place for 1–2 months to get more eruption if desired. There are times, as in the case of a very over-closed bite, when a second or even a third bonding procedure can help to further reduce the need for orthodontic appliance therapy later.

Vertical division primary molar composite build-ups work especially well in Class II Division I situations from age 2 to age 10 to open deep bites. When a Class II Division 1 malocclusion is opened, the mandible gains room to translate forward and often does so on its own. This occurs frequently when the composites are inclined properly, allowing forward mandible positioning without side interference. The tongue gains more room too so it can act to orthopedically develop small dental arches during swallowing that can occur thousands of times during a day. Also, when normal room becomes available for a normal sized tongue, impaired speech can be affected and can improve.

Cephalometric evaluation and diagnosis is important to review before vertical occlusion is altered because three-dimensional planes of occlusion can be altered too. For example, Class II Division 2 malocclusions may benefit from vertical dimension primary molar build-ups. But Class II Division 2 malocclusions may require a three-stage sagittal maxillary expansion appliance or utility arch to move a retruded anterior segment forward. The maxillary three-way appliance may be needed to turn the Class II Division 2 into a Class II Division 1. Then bonding to open the bite can free the mandible to translate forward into a Class I Division I without going into an anterior Class III malocclusion.

Composite bonding can act like other "fixed" orthodontic appliances to help guide tooth and jaw growth. It has advantages over all other forms of treatment when applied correctly. Application and occlusal shaping of composite on two to four teeth takes only 50–60 minutes, but it can cause changes for months or even years. The biggest advantage is in preparing dental teeth and arches for much more routine fixed bracket therapy if and when needed later.

This article has shown "real" early functional Jaw Orthopedics (FJO) diagnosis and treatment is needed from birth to age 8. Earlier orthodontic treatments make good preventive sense, so a timely new FJO standard is warranted and has been introduced. Earlier orthodontic treatments, specifically unique Functional Jaw Orthopedic treatments have been discussed and described, and should be prescribed by progressive general dentists, pediatric orthodontists and orthodontists for the benefit of their patients.

**Literature List**