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Anterior Open Bite

An anterior open bite is a condition whereby the patient experienced excessive posterior vertical growth of the upper jaw (also known as, the vertical maxillary excess). The posterior teeth touch when biting/chewing. The anterior teeth do not touch. This makes biting through food very difficult or impossible and can have negative speech effects.

A compromised airway during active growth and development can also contribute to a narrow upper jaw and an anterior open bite condition. Breathing through our noses is something we take for granted. However, if the nasal airway is compromised (large tongue, large tonsils/adenoids, nasal septal deviation, allergies, etc.), the patient is forced to breathe through their mouth, and the tongue cannot provide a lateral force on the upper posterior teeth for normal transverse development.

A common Oral/Dentofacial Orthopedic appliance used for an anterior open bite in a growing patient is an Open Bite Splint. Together with use of Temporary Anchorage Devices (TADs), the Open Bite Splint is designed to help close the bite in anterior open bite cases by intruding the upper posterior teeth.

In the case of an adult patient with an anterior open bite who has completed their adolescent growth and development, the ideal solution involves a combined orthodontic and surgical approach. The pre-surgical phase of treatment includes the use of braces to properly align the teeth, clear out rotations, and coordinate the opposing dental arches in preparation for a surgical impaction of the upper jaw with auto-rotation of the lower jaw to close the anterior open bite.

