A PHILOSOPHY OF OPEN BITES AND ANTERIOR TONGUE THRUSTS AND THE NEED FOR EARLY INTERVENTION

When a young child of 5, 6 or 7 years of age has an anterior open bite and they suck their thumb, the incisors usually erupt fully and remain fully erupted following successful correction of the thumb-sucking habit. Rarely does the open bite return. In fact, the child frequently develops an excessive overbite later if an uncorrected overjet remains. If this same thumb-sucking habit is corrected at 9, 10, or 11 years of age, a tongue thrust swallowing pattern frequently remains afterward that is very hard to correct.

There seems to be a natural time to learn correct swallowing patterns in the same way a child must learn to speak their native language properly. Experiments have been done with children of various ages moving from one area to another with different dialects. If the child transfers from one country to another before the age of 7, he learns the new language without an accent and no one can tell that he came from a different area. If a child moves after 8 to 10 years of age, the original accent is usually never lost. It is thought that the neuro connections in the cerebrum become complete and to coordinate the tongue and mouth becomes increasingly more difficult as the child matures beyond 7 years of age[1-5].

A similar situation probably exists with swallowing patterns. If the teeth are allowed to erupt normally at about 7 years of age, the child will usually develop a normal swallow without the need for special instruction. If a child sucks his thumb prior to the normal eruption time of the permanent incisors and an open bite exists, the recommendation would be to correct the habit by the time the upper adult incisors are first erupting into place. When this occurs, the incisors can be guided properly into an ideal anterior occlusion by the Nite-Guide® or Occlus-o-Guide® appliance. When this occurs, the open bite will not return and a normal swallowing pattern usually develops naturally. Rarely is myofunctional therapy necessary if this procedure is followed. If the same procedure is followed at 9 or 10 years of age or older, a persistent abnormal swallow usually persists, often necessitating specific therapy for its correction or unacceptable relapse.

The recommended method at the time of normal upper incisor eruption is to tell the child to substitute the Nite-Guide® or Occlus-o-Guide® appliance for the thumb. In about 20% of cases the child will correct the thumb-sucking habit in this way. The child is given about two months to self-correct the habit. If this is unsuccessful or at least when the upper permanent central incisors start to erupt, a fixed habit appliance should be cemented in place. The Nite-Guide® or Occlus-o-Guide® can be trimmed slightly with a carbide acrylic bur so that it can be worn directly over the habit appliance without infringement on the lingual plastic area. After the teeth are fully erupted and the overjet has been corrected, the Nite-Guide® or Occlus-o-Guide® can be reduced in wear in order to retain the corrected overjet. The corrected open-bite will usually retain well and no anterior tongue thrust will develop.

It should be mentioned that it is important to analyze in any open bite case whether there is any problem with restricted breathing from enlarged tonsils or adenoids. Normal breathing, in any case, should be restored which can be followed by the use of the Nite-Guide® or Occlus-o-Guide® to allow the incisors to erupt properly. Skeletal open bites that are associated with an excessively long anterior face height (N-Me or ANS-Me) that are associated with anterior open bites, are a contraindication for the use of the Nite-Guide® or Occlus-o-Guide® appliances. This type of open-bite is often also associated with air intake insufficiency problems and should be checked accordingly with their pediatrician or ear, nose and throat specialist. It is not normally recommended that the Occlus-o-Guide® be used in these cases since the excessive face height should be closed for its proper correction and the Occlus-o-Guide® is actually designed for the opposite problem by having more interarch material in the anterior and less in the posterior and in this way, the appliance reduces the overbite by creating eruption of posterior teeth. This process can be reversed, by creating a slit or cut made vertically from the upper incisal edges through the plastic vertically to the incisal edges of the lower arch. The Occlus-o-Guide® can then create depression of the posterior teeth and eruption of the anteriors. Any symptoms of TMJ problems arising from such a procedure would warrant the immediate cessation of appliance use.

References:

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