

Really Straight Teeth

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South Florida's Full Service Orthodontist



Early Interceptive Class II division 2 Treatment

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The so-called "rabbitted" bite (Class II div 2) is one of the most unrecognized and misdiagnosed in the dental profession.



Interestingly, most Class II bites do not look like they need treatment because these patients have a very pronounced chin button and their upper incisors are leaning palatally showing no overjet. Most Class II div 2 cases I have seen in private practice in 11 years do have lower jaw retrusion. In most cases that do have this malocclusion, the patient requires early interceptive treatment.

The following areas will be discussed:

- 1) What causes Class II div 2 bites?
- 2) Can Class II div 2 bites be prevented or kept from worsening?
- 3) Can a Class II div 2 bite be treated in the age group of 6-8 years?

#1: What causes Class II div 2 bites?

The subject of what causes Class II div 2 bites has to do mainly with the areas of genetics and occlusal interferences. Many Class II div 2 problems "run in the family" and have been traced all the way up the family tree. The classic facial appearance of this type patient has a square-shaped look from the front with pronounced cheek bones and chin button which often fakes the dentist out from referring early.

The dental appearance has the rabbitted look we learned about back in dental school. The upper central incisors are tipped palatally and the laterals are tipped labially giving the false illusion there is no overjet.

The real problem in most of these cases is that they usually have a deep bite. The teeth are not only affected, but the bite actually is collapsed along with the jaw structures. The lower jaw, being retruded, allowed the upper and lower incisors to miss each other when they erupted. But the real problem now is that the lower jaw is never allowed to grow out since the lower jaw is now locked back due to the deep bite.

The only true way to diagnose a Class II div 2 bite is with a lateral cephalometric X-ray and tracing the film and measuring the bony structures. This can show the jaw alignment and how the upper central incisors are tipped palatally locking the lower jaw back from growing forward.

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Adult & Child Braces and Early Interceptive Treatment for Ages 6-11

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#2: Can Class II div 2 bites be prevented or kept from worsening?

The second question deals with the early detection and referral of any patient who has a Class II div 2 bite or deep bite problem. This should be at age 7.

The key is to think of the Class II div 2 case as a Class II div 1 in disguise. Once the incisors are aligned they will protrude forward like a Class II div 1, but a deep bite will still exist. The deep bite then has to be handled so that the jaw structures and muscle structures do not grow abnormally to this incorrect relationship.

Lower jaw growth has to be done before the age of 9. But, the patient needs to be seen earlier to prepare for the lower jaw growth. Expansion of the upper and lower jaws are often needed first. Then the incisors have to be aligned to rid of the rabbitted look. Then the lower jaw growth is attempted.

Lower jaw growth does not occur on its own in a Class II div 2 case! The lower jaw is locked back and has no chance to grow out. Most Class II div 1 cases do not growth out either and if it does it is luck. Results can be seen in as quickly as 17 months.

#3: Can a Class II div 2 bite be treated in the age group of 6-8 years?

The third historical issue dealing with early treatment deals with what we call "orthopedics". Orthopedics is skeletal correction via growth alteration.

The Class II div 2 has to be diagnosed properly to see when each step of the early treatment should commence. Again, the lower jaw retrusion is difficult to see with the naked eye or without a lateral cephalometric X-ray. All Class II patients must have a cephalometric X-ray at their first orthodontic exam to truly diagnose this. Telling a parent of a Class II div 2 child at the first orthodontic exam "that it appears okay" and we need to wait" without first taking this X-ray will only set one up for trouble later on when it is found that the lower jaw was actually retruded.

I have in my practice seen over and over a patient who has been told to wait to treat their Class II div 2. They were told that nothing could be done until after age 13 or 15 when the lower jaw has stopped growing. Then the parent is told the alarming fact that upper jaw surgery is needed and it could have been prevented if diagnosed and treated early at age 7.

The other problem of waiting to treat the Class II div 2 case is that it is harder to move the upper centrals forward when the bone is harder after the age of 10 putting stress on the bony plates on the labial of these teeth. Also, trying to overcome the strong masseter muscles that a Class II div 2 usually makes it harder to correct the deep bite after the facial growth has finished.

The early treatment of a child at age 7 with a Class II div 2 bite is simple to understand and treat. Many patients that have this problem need to also be treated early to avoid extractions. The reason for this is that they have such strong masseter and other facial muscles

Example of an Early Treatment Class II div 2 Bite Case

The below patient had a severe lower jaw retrusion and narrow arches. Notice the deep bite that is locking the lower jaw growth from growing forward. The head basically grows with the brain case growing like a balloon and the upper and lower jaws growing forward. In Phase I, the arches were both expanded and then lower jaw growth was done with special elastics and coils (no plastic appliances nor bulky Herbst appliances were used). The deep bite has to be corrected in Phase I. Later, full braces were placed in Phase II for only 12 months to obtain a result without jaw surgery or extractions. She ended up with a great result even though she has a long pointed nose.



that we need to try to keep as many teeth as possible to prevent these muscles from squeezing the bite back down into a collapsed, over-closed relationship later in life.

For that matter, when patients are finished with their teenage braces, I have learned to design their upper retainer with a passive bite plane effect. What this is is a flat acrylic behind the upper incisors where the lower incisors come in contact with the upper retainer. The lower incisors make "spit contact" with this upper bite plane retainer so that the muscles can't squish the bite down producing a deep bite relapse. This also serves as extra plastic behind the upper centrals to not allow the upper centrals to relapse palatally (which is the #1 relapse problem I have seen in correcting the Class II div 2 problem).

The hardest thing to tell a mother of a teenager who comes into the office is that many of the problems her child has needed to be handled at an earlier age and now the case requires extensive braces and jaw surgery to treat the Class II div 2 bite. So, if there is any doubt that a patient should have an orthodontic exam early (as recommended by the American Association of Orthodontists at age 7) it would be best to have the child seen early to provide the best future for the child dentally and economically.

About Dr. Fox

Dr. Fox learned how to treat severe early treatment cases, periodontally involved cases and jaw surgery cases at the University of Tennessee which is one of the few schools in the United States who gives a Masters Degree in Orthodontics and Dentofacial Orthopedics. Dentofacial Orthopedics deals with early interceptive treatment

at the ages 6-8. Also, it deals with patients who need jaw surgery as a component to their orthodontic treatment. Dr. Fox has finished over 3,500 cases having severe problems. He also received training in cleft lip and palate cases and other types of syndrome cases.

He has over 30 copyright inventions in the field of orthodontics with many in the computer area and office form designs. Most of his training before going into orthodontics was in prosthodontics where he learned how to restore the occlusion of severe cases and how the occlusion of a finished orthodontically finished case should like. Gnathological occlusion that relates to the function of the TMJ area was learned early in his career and has contributed to a low relapse of finished results he has obtained.

In eleven years, there have been very few retreated cases in his practice. He has trained under many clinicians that are leaders in facial growth that have developed appliances for jaw growth. Many treatments no longer require the use of bulky plastic appliances (as Bionators, Herbst, etc.) and now are replaced with special coils and elastics hooked to braces on the incisors and 1st molars.

Dr. Fox makes it fun to come to his office. Most of the staff have had braces treatment and know what its like to have had them. 9 out of 10 patients who come to his office have found it affordable to be treated there with payment plans and reasonable prices and they start treatment with him!



Important Note

The general practitioner is in an excellent position to detect, intercept and correct minor orthodontic problems early, thus making it unnecessary for the child to go through complex orthodontic treatment at a later date. Most patients who have Phase I early treatment usually only have 12-18 months of simple Phase II teenage braces. 5-10% never need Phase II. Getting the child in at age 6-7 is ideal; after age 10, we're lucky if prevention can be accomplished; and referrals that come after age 10 come too late for prevention or early treatment interception.

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For Ages 6-11

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