Straight Teeth

South Florida's Full Service Orthodontist

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

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Braces with Jaw Surgery

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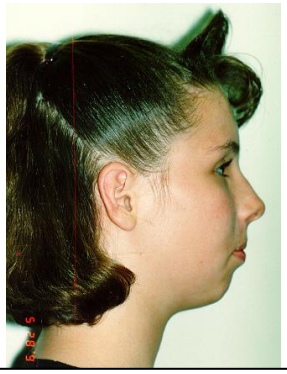
Many patients who need braces actually have jaw alignment problems. If the discrepancy between the upper and lower jaw alignment is more than 4-5 mm. jaw surgery along with braces is usually the only stable treatment. Without jaw surgery, a patient's bite can be left off, an overjet may be left and possibly the result may relapse after the braces are removed.



Above: patient with upper jaw extrusion and lower retrusion.

Interestingly, most jaw surgery cases can be handled swiftly and efficiently as early as ages 12-14 on a case by case basis:

1) What are the basic surgical procedures available today?

2) How do I tell a patient that they may need braces along with jaw surgery?

3) Before and after cases.

I will discuss these three views individually, providing a broad overview that permits the reader to view the subject from practical and current perspectives.

#1: What are the basic surgical procedures available today?

The lower jaw can be set back as in a Class III case or it can be set forward as in a Class II case. The upper jaw can also be set forward as in a Class III case, but it is hard to set back due to the pterygomaxillary fissure area. The upper jaw can be widened surgically, usually done at the beginning of braces while the other procedures are done at the end of braces.

There are also other unusual types of jaw surgery. There is segmental surgery where the upper right or left posterior bone and teeth can be surgically set upwards. This is from having missing lower teeth and over time the upper back teeth and bone extruded into the lower space(s).

The upper jaw can also be cut into 3 pieces as what is needed in most open bite cases. This is like the segmental jaw surgery procedure but the upper back portions are intruded and the front part (canine to canine) is moved to fit with the lower anteriors.

There are other surgical procedures but they are complicated and involve patients who have very asymmetrical jaw structures or syndromes.

#2: How do I tell a patient they need braces along with jaw surgery?

One way to tell a patient is state that their bite is really far off due to their jaw structures. Tell them they need to see an orthodontist for braces and leave it as that. Many times, by mentioning the "s" word (surgery), the patient will focus on that and never get fully educated about what braces can do and not do with or without surgery.

I have found educating a patient about braces that involves jaw surgery is like educating a patient about periodontal disease or bridges. They can't see the problem unless x-rays and models are made of their teeth and shown to them along with demonstration pictures, models and diagrams. Have you ever noticed a problem and then just start talking to the patient and they look at you with that clueless look? Well, the same will happen if you mention the surgery word prematurely.

I find that once I mention the "surgery" word, I am then committed to a 30-45 minute discussion. So, I do not even open that door until I look at my watch and see that I have the time to discuss it or more harm and confusion will be done to the patient.

At the initial visit I do mention that "the jaws appear off" unless the patient absolutely already knows, but then I have to have the long discussion or they usually will not do anything further and I will not usually ever see them again. Then, I feel I did not do my job as a doctor to properly educate them so they can make the correct choice of to do jaw surgery or not.

Here is what I tell them in the long discussion. I first get them to tell me that their jaw is off; this way I know they know it is. I educate them until they say it! Next, I tell them the lower jaw surgery is done inside the mouth, not through the outside of their face (they always think this!). I then tell them that the surgery is done in the same area as the wisdom teeth.

I then tell them the lower jaw surgery is usually the same or less pain than having your wisdom teeth out. Most will experience what that pain feels like since most patients need their wisdom teeth out 6-8 months or more before lower jaw surgery is done.

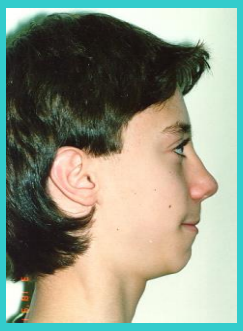
I tell them that when I have surveyed my patients after surgery, every one of them did not complain of the pain. The main thing they did not like was the swelling since lower jaw surgery causes the face to swell 2-4 times more than wisdom teeth extractions. The swelling goes down a lot after 3-4 days.

I tell them that this is the main reason why this has to be done in the hospital is because of the swelling. The swelling makes it impossible to eat and sometimes hard to breathe. They stay in the hospital is usually one night and you go home and rest on the sofa like you do after wisdom teeth extractions.

Many patients do not have to have their mouth wired shut. With rigid fixation (special screws and plates) I have had patients start eating soft things within a week. Other cases can take longer depending on severity of the problem. Patients usually have the procedure

Example of Lower Jaw Surgery Case with Braces

The below patient had a retruded lower jaw. The lower incisors were leaning forward and the upper incisors were leaning towards the palate. Therefore, his teeth had "compensated" for the retruded lower jaw. When the teeth "compensate" they also hide the true skeletal problem that exists (lower left picture). The middle picture shows the patient one week before lower jaw surgery. The incisors have been moved to their normal positions and now the lower jaw retrusion can be seen. The lower right picture shows the patient one month after jaw surgery.



done on a Wednesday, go home on Thursday and back to work or school on Monday.

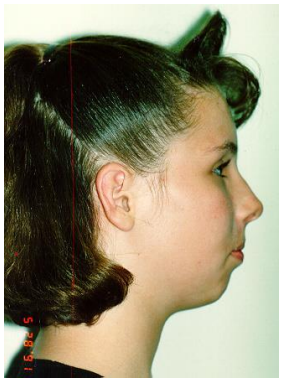
I then show them the computer photography we did of the expected way they will look like. I also have their smile corrected on the frontal view of their face for them to view!

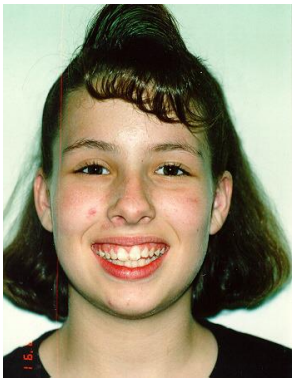
Then, the patient is referred to the oral surgeon with the entire work-up. This is the step where the hang-ups begin. I have never had a patient who was properly educated and go to the oral surgeon and they state they just do not want to have surgery. It comes down to the money. Today's insurance companies have really screwed-up the insurance coverage for jaw surgery cases. Jaw surgery is a big ticket item and insurance companies even when the patient has coverage makes the patient and the oral surgeon jump through hoops before they will say yes to coverage.

So, the key to helping the patient in your chair receive the best orthodontic care is to have them go through the correct steps of education. Without it, the patient may never get treatment, get confused and may even get upset.

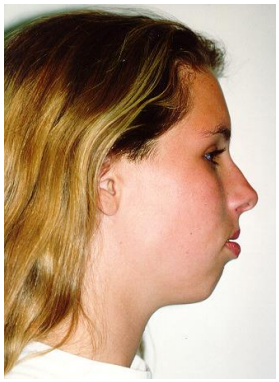
#3: Before and after surgical orthodontic cases:

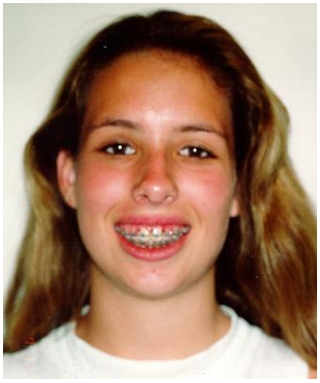
The below cases are here to briefly show the cosmetic changes that can be achieved with jaw surgery. I always tell a patient that we are here to give them straight teeth and a straight bite and not to change the way they look. The cosmetic change is a side effect of having the bite corrected. I am always cautious about a patient who wants their looks to change and is clueless about their bite.



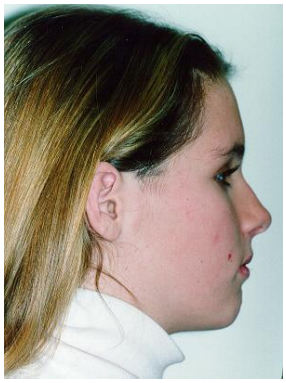


Start of treatment: Extruded upper jaw, retruded lower jaw and no chin button.

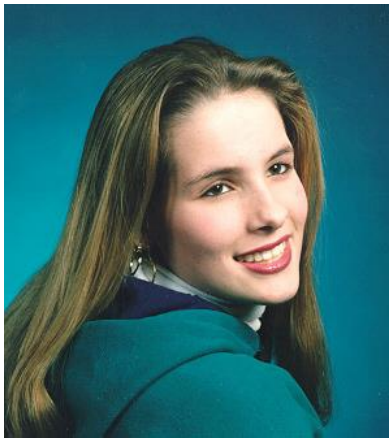




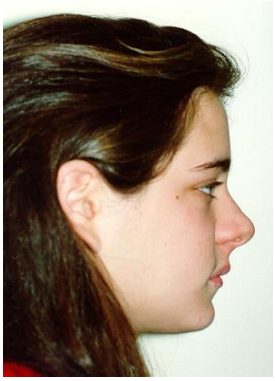
1 week before surgery: Upper jaw is more extruded, nose-to-chin distance very long, no chin and retruded lower

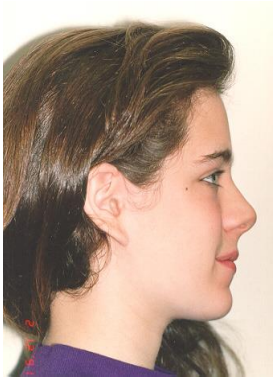


1 month after double jaw surgery and chin addition: Upper jaw intruded, lower jaw set out and lower chin surgery. Slight swelling still present.



1 month after above photo: Patient brought Dr. Fox a school photo. Her swelling has now finally disappeared. Patient's mom states she is best looking girl in the school!





The above patient's lower jaw was so retruded that it made her nose look large. After braces and lower jaw surgery, she ended with a beautiful profile (no alteration to the nose was done).

Summary

To summarize, jaw surgery is a very optimum treatment along with braces for a select group of patients. It will allow dramatic skeletal and facial improvements with minimal extra effort. This allows children to mature, interact socially, and develop mentally unencumbered by disfiguring skeletal and dental malocclusions.

For adult patients, it tends to make them look 5-10 years younger, it achieves better function and allows the teeth to be restored better in crown and bridge cases.

About Dr. Fox and his office

Dr. Fox has treated many orthodontic surgical cases in the 27 years of being in private practice. He has learned never to judge a patient whether they would elect to do the most optimum treatment plan if their jaw alignment is off. He believes a patient should know everything about their orthodontic problems so that they are the ones to decide which treatment is best for them.

One final comment is needed here. Amazingly, almost every patient after jaw surgery is asked would they go through with the treatment again if they had to? Everyone has said yes. When asked what they feel about their final result, everyone has stated that it is unreal how nice their bite is now and they stand there usually opening and closing showing how their teeth now fir correctly together. You would expect some comment how nice their face now looks but you do not!

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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