Problem Solvers 47 Occlusal Disease Part 1 Synonyms: Super-eruption, chipped teeth, biting on gums, Tooth pain.

Millions of Americans have lost teeth in one or both arches. For some people the first thing they tell the dentist is to "just pull it." This may seem like a good option in the short term but long term it can create many problems. This problem solvers will investigate the long term problems associated with tooth loss. Over the long term shifting teeth and movement of teeth due to extraction can translate into a condition called "occlusal disease."

What happens when I lose one tooth?

First, there is a natural tendency for teeth to errupt into the mouth. They continue to errupt until they touch their opposing tooth. So when a tooth is lost there is a tendency for a tooth to super-erupt until they make contact with either an opposing tooth or the gum tissue where the tooth was pulled!

The next thing that happens is that the teeth that were next to the one you had removed will drift into the space left by the pulled tooth.

This sets up a scenario where teeth that used to touch in a vertical fashion are now touching like a triangle. This can lead to teeth touching where they were not designed to touch. It increases forces and if the teeth have had large fillings and are touching on thin enamel walls, they are at higher risk for cracking or breaking.

What should I do if I need to have a tooth pulled to avoid these biting problems?

Put one back! You need a bridge, implant, partial or temporary partial to prevent the drifting that will occur. By putting a temporary tooth back quickly you can avoid the problems associated with super-eruption and drifting of the surrounding teeth.

I have had a tooth pulled and the dentist says I have to pull the opposite tooth as it has moved. Are there any other options?

Depending upon how far the opposite tooth has moved you have a few options to put shifting teeth back where they belong.

- Orthodontics-by putting on braces you can often put teeth back where they belong horizontally and vertically.
- Surgical repositioning-It is possible in some instances to cut a tooth out of the bone and place it higher up in the bone and fixate it with plates and screws to hold it in it's new position.
- Reduce the tooth-by shaving down extra tooth in the course of making a bridge or crown. The extra tooth may be able to be simply cut off and

covered with a crown.

• Root canals with or without crown lengthening-if the tooth has supererupted too far it may need the nerve removed. Then the surrounding skin and bone would be trimmed to create a longer tooth. This is called crown lengthening and may be required with the root canal to create a tooth that is long enough to hold a crown. In essence you are taking a "long" tooth and shortening it. Then you are lengthening it from the gumline for a tooth of sufficient height for a crown.

I have a crown that sticks way below my other teeth. Is this normal?

When teeth move, the dentist should discuss ways of improving your bite before making a new crown. If a dentist just makes a crown without taking into consideration your super-eruption they are perpetuating the biting problem not fixing it. The porcelain on the crown is harder than your enamel and this may lead to more fractures of the opposing teeth.

My tooth is over grown and I can see the roots, is this problem?

When teeth simply have periodontal disease they are undergoing a disease process where the roots may become exposed. This is different from roots showing due to over growing or super-eruption.

With a tooth that has dropped down due to loss of the opposite tooth you may develop:

- Sensitivity
- Root cavities
- Loss of bone under the tooth called furcation involvement.
- Uneven bone levels on adjacent teeth making the teeth harder to clean.
- Cavities on the sides of the adjacent teeth may occur more easily.

How much time do I have to replace a tooth once it is pulled?

Since you lose 60% of the height and 40% of the width of the bone after a tooth is lost in the first year it is important to address tooth loss within a year. The problem of super-eruption may take several years and occurs at different rates for different people.

I am missing a tooth and even though the tooth is gone that spot hurts! Why?

Teeth are very hard and gum is very soft. When you have a missing tooth or "edentulous space" the food gets pushed into this area. The force of chewing and abrasion of food can cause pain where the tooth used to be.

I am missing a tooth and have lost bone what are my options?

As mentioned in previous Problem Solvers the options to rebuilding bone are as follows:

- Block Grafting-a block of bone from the jaw or chin area can be placed over the area.
- Ridge Spreading-special instruments are used to open the bone and put bone in between or inter-positionally in the spread area.
- Tent screw grafting-tent screws and bone are added to the area.
- Orthodontic movement of a tooth into the missing space and then back again can bring the bone to the area that is deficient.
- A bridge or Virginia Bridge can be placed to replace the missing tooth without rebuilding the bone.

The key is to replace the missing tooth with what ever option you decide is best given your personal situation with your dentist before occlusal or bite related problems occur.

Richard B. Winter D.D.S.M.A.G.D.D.I.C.O.I.
Master Academy of General Dentistry
Diplomate International Congress of Oral Implantologists
WWW.WINTERDENTAL.COM