Problem Solvers 17 Bad Bites

Synonyms: Bull dog bite, under bite, overbite, open bite, class 1,2,3 mal-occlusion,

Patients are very concerned about their looks and their teeth but at times the foundation needs to be changed instead of performing crowns and veneers. Bad bites can be from crooked teeth or jaws that don't line up. This article will explore some of the options available to address these conditions.

Headline: Crooked teeth or bad bites; what are my options?

When children are developing they may have skeletal discrepancies or tooth problems. At times they may have both.

What are skeletal discrepancies and what can be done to address them? Skeletal discrepancies can be classified as a

- Class 1 or normal occlusion
- Class 2 or Overbite
- Class3 or Underbite
- Cross bite where teeth on top are inside the teeth on the bottom. This can be
  a unilateral or bilateral situation and can occur with each of the above
  classes.

People can have upper jaws that grow faster than lower jaws and these are called overbites. The maxilla or upper jaw has either continued to grow faster or the lower jaw may simply have not developed normally. This is called a retrognathic (underdeveloped) mandible.

Your dentist can use a cephalometric x-ray to compare the upper and lower jaw growth to fixed points on the skull to see whether the culprit is the upper or lower jaw or both.

The treatment for skeletal problems can involve dentofacial orthodoedics and braces (orthodontics). Orthodontics or traditional braces, involves brackets and wires to direct tooth movement.

Dentofacial orthopedics involves the guidance of facial growth and development; by using appliances that stimulate bone growth accentuating desired jaw growth and guiding the growth toward an ideal result. Since most of the growth occurs at a young age, children are wonderful candidates for this first phase of treatment.

Dentofacial orthopedics are appliances that come in different designs and have screws, springs, rubber bands or titanium mechanisms that can be adjusted to influence jaw growth and development.

Since the sutures or bony connection in the skull between two bones don't fully ossify or fuse until growth stops, using subtle pressures from these appliances can open the sutures slowly. This can influence how the jaws grow and can help create expansion or bone growth without the need for surgery.

### Will dentofacial orthopedics always work?

No, the ability to influence growth and development is not guaranteed. A patient's growth and development has physiologic endpoints. This means that perhaps surgery may be needed at a later date, but perhaps, this orthopedic correction can eliminate the need for surgery all together.

# How do these appliances work?

By using screws that are turned slowly on a regular basis, the bone will grow as the suture is opened and continue to grow until the screws are no longer turned. This phenomenon has to do with the biology of bone growth under stress.

## What is a headgear?

Headgear is an appliance that can be used to stop maxillary or upper jaw growth while the lower jaw catches up. The headgear can be used to create some expansion as well. The appliance is attached after school and all night long and is held in with an elastic strap that goes behind the head.

#### What is a reverse pull facemask?

For patients that have underbites or Class 3 mal-occlusions, they have an appliance that is attached to the back of the head with a frame that goes in front of the face. Then using rubber bands or elastics, the appliance is connected to the maxillary teeth to help advance the upper jaw or maxilla.

#### Are there a lot of different types of appliances?

Yes, there are appliances for expansion, and tooth movement. As well there are appliances that are designed to advance the lower jaw and the upper jaw or influence their growth. Many of these appliances can be used in conjunction with other appliances or with traditional braces.

My child is not very compliant but needs appliance therapy, what can I do?

There are appliances that are removable, which require compliance from the child

as well as fixed appliances which are cemented and cannot be removed. If the dentist understands the problems, they may be able to give you fixed appliances.

If my child has appliance therapy can we avoid braces?

The use of appliances can help develop an arch form or correct a cross bite. They can influence skeletal growth and development. The need for further orthodontics after orthodontics can only be determined after evaluation of the bite post appliance therapy. The good news is that if braces are needed, they may be easier and quicker if this treatment was undertaken.

Do all orthodontists and general dentists that do orthodontics use these appliances?

No there are different philosophies regarding the best way to accomplish orthodontics. Dentofacial orthopedics is simply a tool, which can help tremendously to create an ideal bite.

What are the earliest ages when these appliances can be used? While this first phase of orthodontics will typically begin at 7-9 years of age there are some dentists that may choose to start at an even younger age.

Your dentist or Orthodontist can explain the various phases of orthodontics and why each is needed and the approximate time frame involved.

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