



## BIOESTHETICS

Our goal at Good Orthodontics is to provide all of our patients with the highest quality of orthodontic care. Our aim is to educate our patients to allow them to choose excellence and to enjoy the long term benefits of that decision.

The objective is to provide excellent facial and smile esthetics as well as optimal functionality -BIOESTHETICS\*. We strive to provide much more than just straight teeth. Drs. Bob and Ron Good focus on the entire gnathologic system which includes addressing the skeletal structures (upper and lower jaws and facial framework), the dentition (teeth alignment), the musculature (muscle function), TMJ (temporomandibular joints) and evaluation of the airway. There are many factors that determine how one's teeth fit together and function. The goal is that the system be balanced and function in harmony.

A gnathologic orthotic is a removable orthopedic appliance that is often indicated as a means to accomplishing these goals. This appliance is fabricated on a jaw motion simulator which mimics each patient's particular jaw movements and bite relationship. The gnathologic orthotic is utilized as an invaluable diagnostic aid and therapeutic measure to obtain a healthy and comfortable jaw joint position. It is a highly sophisticated appliance and is not to be misconstrued with a night guard or bite plate.

## DIAGNOSTIC

The key to achieving successful treatment outcomes begins with making the proper diagnosis. In order for Drs. Bob and Ron to prescribe the appropriate treatment, it is important for them to accurately determine the bite and jaw relationship. As the patient wears the gnathologic orthotic, it simulates an ideal bite or occlusion. This eliminates the proprioception (unfavorable muscle memory patterns) which is dictated by improper tooth positions (malocclusion) and causes the lower jaw to assume a compensated position. Allowing the muscles to relax enables the lower jaw to seat properly in the jaw joint socket.

Drs. Good will adjust and refine the orthotic until a comfortable jaw position is established. After identifying the optimal and comfortable jaw position, the appropriate treatment can then be prescribed. This treatment may include coronoplasty, (occlusal adjustment to balance the bite), orthodontics, orthognathic surgery (jaw surgery), restorative/prosthetic therapy, periodontal therapy or some combination of these modalities. It is necessary to design and select an orthodontic treatment plan that is customized for each patient according to their facial, skeletal and dental makeup. By going through this important diagnostic procedure, our patients and our doctors are better able to decide which treatment is best for them.

## THERAPEUTIC

The orthotic appliance is not only used in diagnosis, but also as an orthopedic treatment device to address bite disharmonies and associated symptoms. Not everyone with a malocclusion (bad bite) is aware of existing problems. Some patients may express a myriad of symptoms. These may include facial pain, headaches, muscle soreness, jaw joint degeneration, jaw clicking, popping and locking, restricted jaw opening, loose teeth, wearing down of teeth, hearing deficit, ringing in the ears, dizziness, etc. These symptoms are often classified as TMD, (Temporomandibular Joint Dysfunction), and/or MPD, (Myofascial Pain Dysfunction). An improper bite is much like when the gears of a machine or a car are out of alignment. There is more wear and tear on the system ... the tires become worn and there is mechanical breakdown. Wearing an orthotic affords a differential diagnosis identifying those symptoms that are attributed to the malocclusion as well as establishing the optimal jaw position. Many patients experience significant relief of their symptoms from this orthotic therapy.

## PROTECTIVE

Although a smile may look good, the jaws and muscles may not be balanced and consequently not functioning optimally. If this is the case, the patient is subject and prone to have tooth wear, bone and tooth loss, muscle soreness, degenerative changes in the TM Joints, etc. It can take many years before a patient is aware of the damage that is occurring.

A well-adjusted gnathologic orthotic that both simulates an ideal bite and affords an optimal jaw/TM Joint relationship protects the gnathologic system. It serves to minimize harmful forces and helps to prevent further breakdown and deterioration.

An orthotic may also serve as an excellent retainer in cases when optimal treatment goals are not attainable or when compromised treatment plans have been elected. In addition, the gnathologic orthotic may be worn to protect dental work for patients who have a history of bruxism (grinding of teeth) and to reduce the likelihood of recurrence of TMD. While in some situations it may not be the final solution, it is an effective interim measure.

\*BIOESTHETICS is the study of living things in their natural environment of healthy function and beauty.  
- Dr. Robert Lee

GNATHOLOGY is the study of the masticatory system, including its physiology, functional disturbances and treatment.

GNATHOSTOMATICS is the physiology of the mouth and jaws.



Excellence is a GOOD choice

**GOOD ORTHODONTICS**

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