New Opportunities for Interdisciplinary Integration

I have been very fortunate to spend two separate weeks recently at the Pankey Institute in Key Biscayne, Florida, as guest faculty for their TMD II course. I introduced the dentists to what Physical Therapy in general, and Postural Restoration in particular, can offer as part of an interdisciplinary approach to the management of occlusal muscle dysfunction (OMD) and TMD. What a great learning and teaching experience! The participants were fired up about seeking out PRC therapists to incorporate into their patient care teams. Many expressed an interest in attending PRI and PRI Vision courses.

What I have been hearing from dentists around the country is that they are having a hard time finding Physical Therapists to include in their treatment team, and as a result are utilizing chiropractors and massage therapists. I believe that every PRC therapist, whether or not you currently treat TMD, is uniquely qualified to help these patients. The dentist is the one treating the joint; they are asking for help from us to look at the alignment of the rest of the body and accomplish a "quiet" anterior neck – where have we heard that before? In return, we also understand that some of our patients may benefit from dental intervention. Referral to a dentist that specializes in TMD is indicated in the following instances: sudden onset of pain in the TMJ or face, sudden change in occlusion i.e. teeth not touching, history of hitting harder front vs. back teeth with full closure of the mouth, front teeth that do not touch when the molars are in contact, missing molars on one or both sides, hypertrophy of one or both masseters, and tongues with scalloped borders. Any change in the bite following successful orthodontia should be investigated.

When you receive inquiries from dentists in your area about your interest in and ability to treat their complex pain patients, I encourage you to keep a few things in mind. These dentists are highly trained in all aspects of TMD care including imaging, splint therapy, equilibration, restorative and surgical interventions. They fabricate their occlusal appliances based on the individual needs of the patient, and have great success with flat plane mandibular or maxillary splints. They prefer full-contact splints for a variety of reasons, mainly that they prevent extrusion of teeth that occurs when there is no opposing contact over a period of time. The key to success is their skill in adjusting the splint periodically. We have found that a great approach is to schedule therapy/dentist appointments back-to-back when the patient is ready for a splint adjustment. From a PT standpoint, this is when you can accomplish neutrality in the clinic, including the Cervical-Cranio-Mandibular chain. The patient should wear his or her splint during the PT session. At the conclusion of the session, place a cotton roll on each side between the back teeth. Instruct the patient not to touch their teeth together until they reach the dentist's office. Touching the teeth together just one time will reset the muscular system to the protective mode. The dentist will then remove the cotton rolls and adjust the splint to the corrected position.

In cases of TMJ pain, headaches, and neck pain caused by damage to or disease processes in the condyle, disc, and/or fossa, the goal is to support the joints in a position that allows healing to occur and accomplishes maximal stability and function. This may or may not happen with the disc in the normal

anatomic position. In many cases the joint will adapt favorably, even in the presence of a dislocated, non-reducing disc. Not every case will require imaging, as the dentist is usually able to determine the position of the disc based on the patient's symptoms and mounted models of the patient's mouth. A good indicator of muscle spasm causing limited opening is the availability of lateral excursion, which would not be possible if the disc is mechanically obstructing movement of the condyle(s). Discuss with the dentist whether or not to provide stretching exercises in the clinic or as part of a home exercise program, as forcing excursion could possibly cause more swelling and pain in sensitive retro-discal tissue, but could be beneficial if muscle spasm is the limiting factor.

In cases of OMD caused by mal-occlusion, the dental splint will mitigate interferences in tooth contacts resulting in a significant increase in patient comfort immediately. We also see greatly improved cervical rotations and the ability to facilitate neutrality in the pelvic girdle and brachial chains. After a fairly short term of splint therapy, i.e. 24/7 wear over 3-6 weeks, the dentist will be able to correct the mal-occlusion through equilibration, which is adding to or subtracting from teeth, or restorative dentistry such as implants, crowns, or bridges.

It is important for the patient to wear their splint exactly as recommended by their dentist – the splint only works when it is in the mouth. Even after optimal occlusion is accomplished, they may require a night guard indefinitely to protect the teeth from wear or fracture if they have CNS mediated clenching or bruxing, or if they require mandibular repositioning secondary to obstructive sleep apnea.

Together we can make a huge difference in the lives of people who are suffering from OMD/TMD. Please don't hesitate to contact me if you have additional questions.

Kathy Johnson, PT, PRC

kajohnson2537@aol.com