Huntington Village Implant & Oral Surgeons

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Don't Miss Out on our Next Seminar!!

Tuesday

June 7th, 2016

3 CE Credits

"Medical Emergencies in the Dental Office"

Presenter: Daniel Pompa DDS,

Registration Dinner 5:30 pm

Lecture 6:00 - 9:00 pm

Knights of Columbus

9A Hewitt Square, East Northport, NY (behind Pat's Farm's off Larkfield Rd)

This course is sponsored by the Suffolk County Dental Society, an ADA-CERP recognized provider of Cont. Ed. (CE) approved by the New York State Dental Association and a designated PACE Program Provider for the Academy of General Dentistry

"Dental Pain Nonodontogenic Tooth Pain"

Wright EF: Nonodontogenic toothaches. *J Am Dent Assoc* 146:406-408, 2015

Clinical Significance: The experience of tooth pain is commonly attributed to the tooth involved, but often it is a referred muscle pain that is being felt. Following a structured evaluation course can help to rule out local, regional, referred, and then other causes progressively, ensuring the practitioner and patient will have greater confidence that the actual cause has been found when the pain is reproduced. TMD strategies are often helpful when the pain in nonodontogenic in origin.

Background: For about 3.4% of teeth receiving endodontic treatment, the pain is either nonodontogenic in origin or the post-treatment pain can be ascribed to a nonodontogenic phenomenon. Therefore, it is important to identify cases when the pain doesn't come from a tooth source but from another pathologic condition.

Case Report: A woman, 45, had constant pain of a 6 intensity on a scale of 0-10 being the worst pain possible, when she ate. It was localized to teeth numbers 30 and 31. First one, then the other was managed with root canal treatment because the patient insisted. In each case the treatment provided only temporary relief, and both of these teeth were eventually extracted. Despite treatment, the patient remained in pain 3 yeas after the initial incident. The extraction sites had healed well and no intraoral pathologic condition was identified.

On palpation of the masticatory and cervical structures, the patient had generalized tenderness of the masticatory muscles and both TMJs. Referred pain to mandibular teeth is usually reproduced by palpating tender areas in the inferior area of the masseter muscle, so her right masseter muscle was palpated, reproducing the pain and leading to a diagnosis of myofascial pain with referral. Since local and regional causes for the pain were ruled out, conservative temporomandibular disorder (TMD) therapies were begun to reduce the impact of the tender area of the masseter muscle. While working through the TMD self-management instructions, the patient revealed that she always clenched her teeth while under stress, deep in thought, driving, or working on the computer. Having been made aware of the habit, she believed she could break it. Impressions were made and an interocclusal record obtained for a stabilization appliance. The appliance was available at the next appointment. After 5 weeks, the patient reported she no longer clenched her teeth during the day and wore the stabilization appliance at night. As a result, she reported no more tooth pain.

Evaluation: Tooth pain is evaluated in an orderly manner (see Table below) to eliminate local causes first, regional causes next, and referred pain from a musculoskeletal structure thereafter. Nonodontogenic pain is most often the result of pain referred from muscles even though the patient commonly does not sense pain in the muscle. Tender areas in the ipsilateral masseter muscle are probably the most frequent causes of pain referral to posterior teeth.

To reproduce the referred pain to a tooth, the clinician should identify where the masseter muscle is tender and apply 1kg (2.2 lb) of force with the fingertip to each tender area for 5 seconds or until tooth pain occurs. The palpation is repeated until the tender area that reproduces the pain complaint is identified. If the masseter muscle palpitations do not reproduce the tooth pain, other masticatory and cervical muscles and the TMJ can be palpated in like manner. If the pain is reproduced and local and regional etiologies have been ruled out, it is highly likely that treating the muscular or TMJ structures using traditional TMD therapies will diminish the pain. If no cause for the pain is identified even after this process, the patient should be referred to a practitioner trained in orofacial pain or neurology for further evaluation.

Table: Recommended Order in Which to Evaluate Tooth Pain

Local:	Tooth for caries, periodontal disease and so forth. Tooth for heavy parafunctional forces
Regional:	Other teeth and sinuses
Referred Pain:	Masticatory and cervical muscles, and temporomandibular joints
Other Causes:	Neurologic, neurovascular, cardiac, psychogenic, neoplastic, and other pathologic conditions

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