

# ABCP Diplomate Application: Exhibit E

## Case Defense: Craniofacial Pain Patient Record Summary (1 of 3)



Candidate Name:	JM
SSN:	056-12-4378
Application Date:	5/15/2013
Patient Name (or code):	PM8145
Date Treatment Began:	1/22/2008
Date Treatment Ended:	5/12/2009 (with 6-month follow-up thereafter)

AMERICAN BOARD OF CRANIOFACIAL PAIN  
 2574 Oak Trails Dr  
 Aurora, IL 60506  
 USA  
 Phone: 630-735-1405

Patient records for cases to be defended should include documentation of the diagnosis and treatment to completion of said patients by the candidate, and should establish to the satisfaction of the Board and exam team, the candidate's ability, proficiency and exceptional skill in a broad spectrum of treatment procedures relevant to the diagnosis and treatment of Craniofacial Pain and temporomandibular disorders of non-dental origin.

- Radiographs
- Models
- Medical History
- Examination (the patient's chief complaint, clinical signs and symptoms, plus a description of the patient's general condition at the inception of treatment)
- Clinical Diagnosis (a pre-treatment clinical diagnosis consistent with the symptoms and clinical tests reported)
- Treatment Plan (a recommended plan of treatment with alternative treatment plans where indicated)
- Clinical Procedures (a presentation of clinical procedures for the case)
- General Documentation (typewritten documentation should be clear and precise; the quality of radiography must be sufficient to derive the information recorded)

Other Documentation (*please list*):

### **Provide a brief description of this case (35 words or less):**

The case presented is an example of a non-reducing disc patient.

Orthotics, manual manipulation and exercises were employed with Phase II equilibration for a final resolution.

Logical evaluation, treatment and patient information is critical to case success.



Case Presentation #1  
for the  
American Board of Craniofacial Pain  
July 2013

# Case I Summary Presentation

- Pain in right temporomandibular joint with opening of mouth( 7 out of 10 ).
- Acute right non-reducing disc subluxation of tm joint
- Right temporomandibular joint capsulitis
- Myalgia of masticatory muscles secondary to closed lock
- Treatment with oral orthotic, manual manipulation for disc reduction.
- Various modalities : exercises , spray and stretch
- Phase II- Equilibration of teeth to balance occlusion
- Continued night time splint wearing

# About the Patient

- Patient is a 64 year old female Caucasian
- Referred by her general dentist
- Single and lives with “two special dogs”
- Initial Exam Presentation on January 22, 2008
- Immediately adamant about “no surgery”



# About the Patient, con't

- The patient's general dentist supplied a "soft" bruxism appliance, but patient experienced no improvement
- Treated with orthodontia twice
- Patient is deeply concerned about avoiding surgery, seeks "holistic" approach

Patient photo:  
Front View

Patient photo:  
Profile View

# History of Symptoms

- The patient states that she was eating Thanksgiving dinner and she felt like “she torqued her jaw”
- All symptoms started at this point
- Patient’s general dentist supplied a soft bruxism appliance to no avail

# Chief Complaint

- Pain with wide mouth opening or eating
- Marked deviation to the right with opening (6 mm)
- Bilateral temporal headaches upon awaking that are maintained throughout everyday
- Pain radiating into right ear, into the cheek and along the mandible.
- Right jaw “locking” closed with joint stiffness.

# Medical History

- The patient is a well appearing Caucasian female, approximately 5'7" tall, weighing approximately 144 pounds. She presents a normal gate but has 15 degree anterior kyphotic curvature at the T-10 vertebral area. Her right shoulder presents a +1, +1 position.
- ROM with head rotation to the L was limited to 55 degrees. All other motions were normal
- She is under the care of a physician at the time of examination



# Medical History, con't

- She is allergic to iodine(shrimp), Penicillin
- She has high blood pressure( 130 / 83 with medication), asthma, swollen ankles, arthritis and hay fever/ allergies.
- Patient related “right joint torque and pop” at Thanksgiving.
- Patient denies any other problems with total systems review.

# Medical History, con't

- Patient has had multiple neck injuries due to falls and car accidents
- Last fall of note was in 1993 when she “fell on her face” and received sutures in her chin. Patient also fell “on her face” in 1989
- Patient denies any general anesthetic or endoscopic procedures.
- BP 128/80, pulse 76, breathing passive and non-labored at 22 respirations / minute

# Dental History & Examination

- Patient referred by her general dentist
- Patient presents 24 teeth (orthodontic – 4 bi and third molars extractions)
- Veneers present on 12 anterior teeth
- Crowns present on teeth 2, 3, 4, 13, 14, 15, 18, 19, 20, 29 and 31
- Root canal tooth 7
- Orthodontia treatment twice

# Dental History & Examination, con't

- Patient presents a 3 mm overbite with a 2 mm overjet, Class I type II
- Occlusion on teeth 18 and 31 only
- Anterior Guidance was limited to posterior molars 18 and 31
- Periodontal pocket depth is generally 2-4 mm
- General dentistry is WNL
- Minor tongue thrust was presented
- Swallowing patterns were normal

# TMJ & Physical Examination

The patient presented tenderness or associated pain when the following areas were palpated:

- Bilateral trapezius muscle pain
- Right mid and anterior scalene muscles
- Right levator scapulae muscle tenderness
- Right longus coli muscle pain
- Bilateral anterior temporalis muscle pain
- Right masseter muscle pain

# TMJ & Physical Examination, Con't (2)

- Right temporal tendon pain
- Right retro-discal and external pterygoid muscle pain with mandibular retrusion
- Right anterior ear wall pain
- Right joint stiffness
- Right pain along cheek and mandible
- Patient noted right reciprocal “click” for years-not present at examination
- Patient noted right pain with eating and opening jaw

# TMJ & Physical Examination, Con't (3)

- Opening dimension was 35mm, right lateral motion was 12 mm, left lateral motion was 4 mm, protrusive motion was 7 mm.
- 6 mm jaw deviation motion to the right was noted upon opening.
- Rotation without translation was noted in the right TM joint
- Right TM joint crepitus was noted upon auscultation

# TMJ & Physical Examination, Con't (4)

- Capsulitis was noted in the right TM joint
- Right gonial notching at the angle of the jaw and was superiorized 4 mm in relation to the left
- Right maxillary posterior occlusal plane is superiorized 3 mm in relation to the Left.
- Head posture was 32 mm anterior to the vertical zygomatic/clavicular plane



# Cranial Nerve Examination

- I: Olfactory – Smell intact bilaterally
- II: Optic Nerve – Intact, Able to read fine print both eyes, no visual blind spots or visual disturbances
- III: Oculomotor, IV Trochlear, VI Abducens,- intact, conjugate eye movement. Pupils react equally to light.
- V: Trigeminal nerve – intact, sensitivity of all three divisions normal bilaterally, contraction of masseter and temporaralis is normal

# Cranial Nerve Examination, Part II

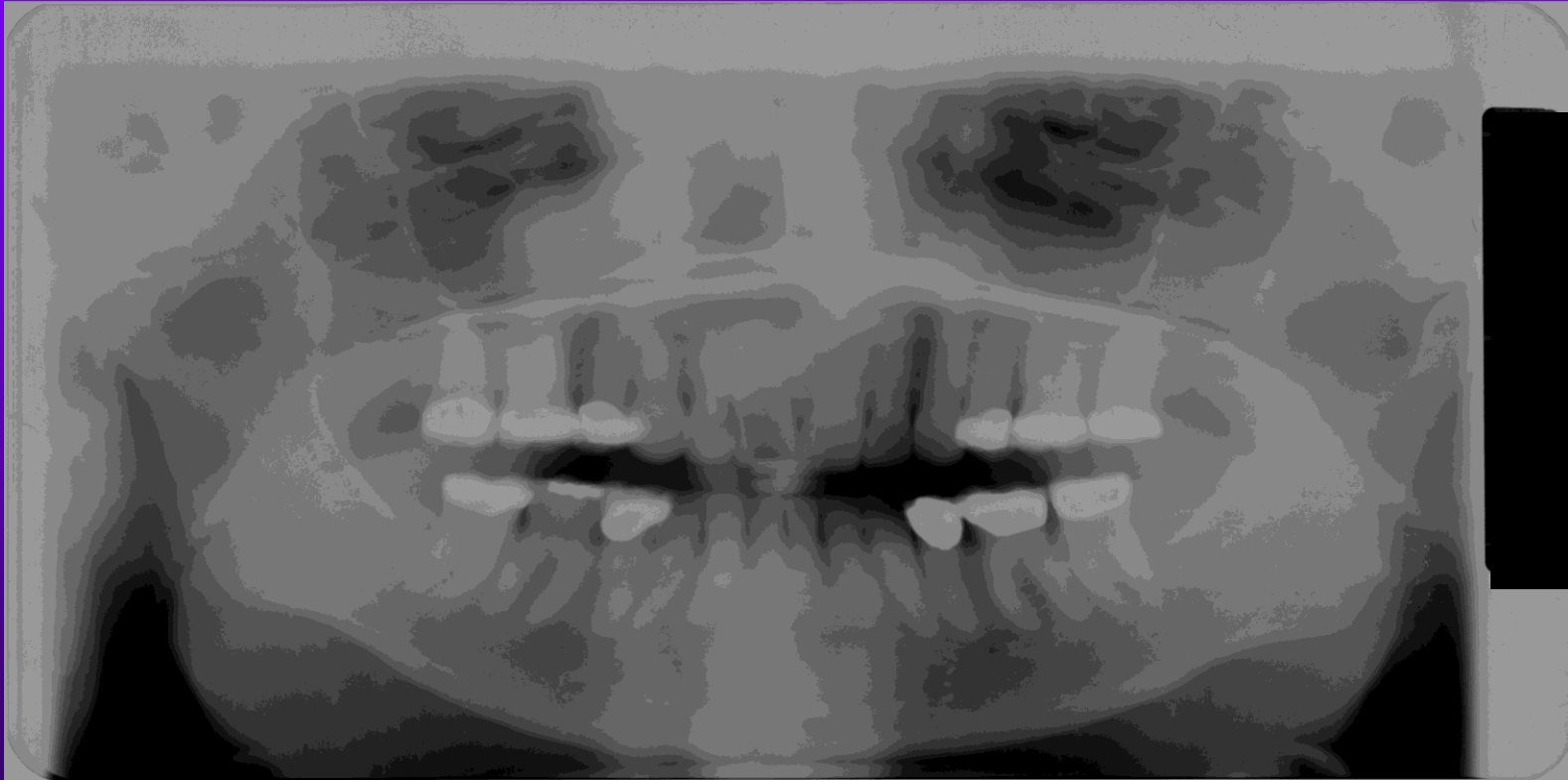
- VII: Facial Nerve - intact- Appropriate movement of muscles of facial expression, taste in anterior 2/3's of tongue is normal
- VIII: Auditory Nerve – intact, hearing is normal
- IX: Glossopharyngeal nerve and X Vagus Nerve - intact, normal swallowing pattern, active gag reflex, normal speech pattern
- XI: Accessory Nerve- intact, normal shoulder shrug
- XII: Hypoglossal Nerve – intact, tongue protrudes without midline deviation.

# Postural, Cervical, Spinal and Oral Myofunctional Examination

- Patient displayed normal “S” curve noting a 15 degree ant spine posture at T-10
- Head posture was 32 mm anterior to vertical zygomatic clavicular line and left head rotation was limited to 55 degrees
- Right shoulder presentation was +1, +1
- Pelvis appeared essentially normal
- Lips were normal, habitually slightly parted and relaxed
- Patient is a slight mouth breather
- No tongue thrust was evident
- Tongue position is between the arches at rest and in the swallow position.

# Panoramic Radiograph

1-22-2008



# Panoramic Radiograph Interpretation

- Left condyle and fossa-medial pole generally WNL with intact cortical plate and appropriate bone density
- Right condyle and fossa-medial pole shows joint degeneration. Condylar head is displaced distally with osteophytic “beaking” formation of the anterior portion of the condyle. The cortical plate is ill-defined

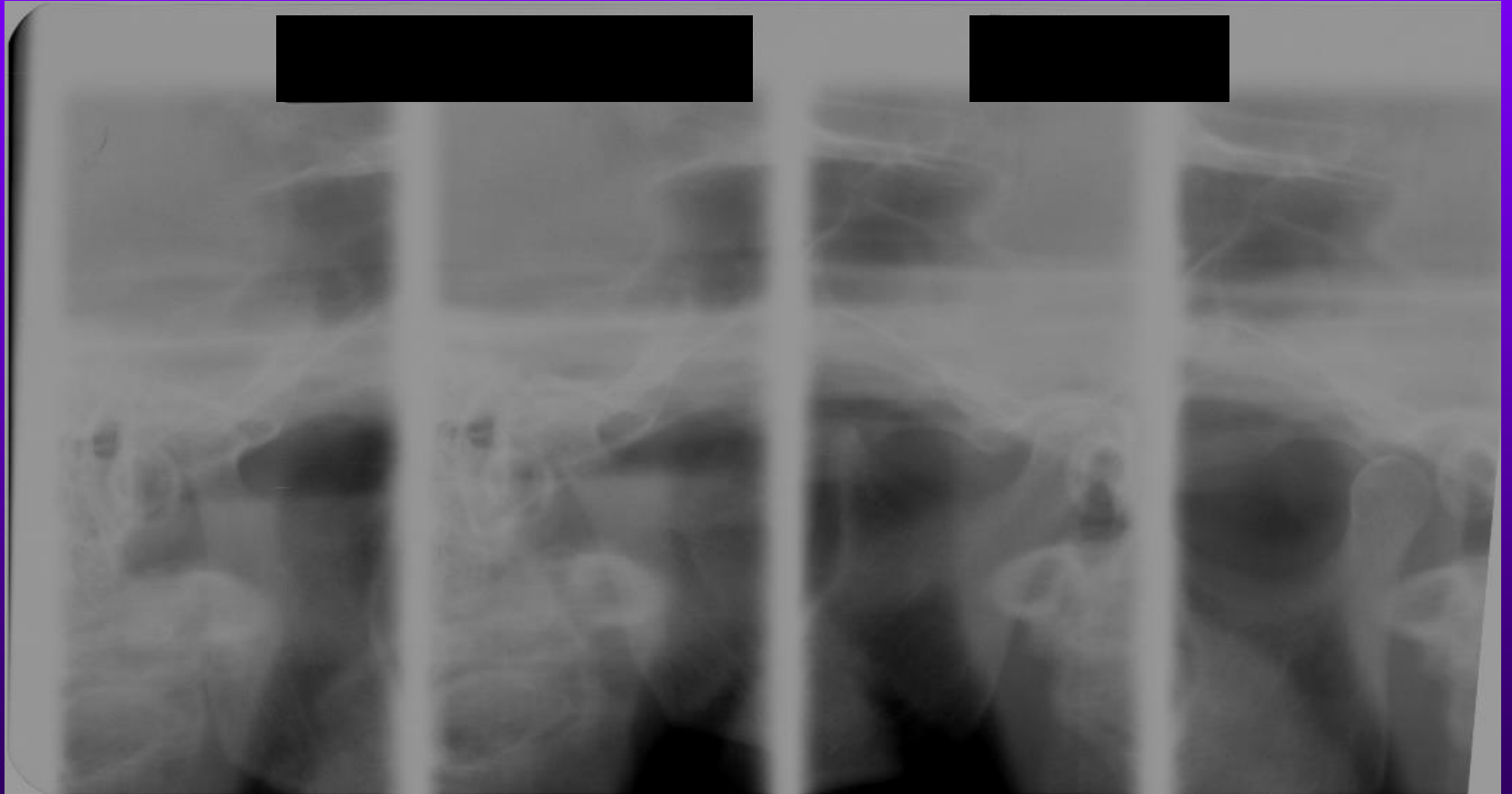
# Panoramic Radiograph Interpretation, part II

- Mandible: Border is smooth and continuous with intact cortical plate and trabeculated modulated, sigmoid notch has a smooth curve and corneoid processes are equal to the condylar height and are inferior to the zygomatic arch. There are single, well defined mandibular nerve canals visualized to the mental foramens. Ante-gonial notching, internal oblique ridges are bilaterally seen.

# Panoramic Radiograph Interpretation, part III

- No gross decay is evident
- Periodontal condition is stable
- No tumors, cysts or fractures
- Sinus areas are WNL, symmetrical and well pneumatized with defined cortical layers evident
- Oropharynx is evident

# Tomograph Imaging





# Tomograph Interpretation of TM Joints

- **Left:** Condylar head appears smooth with good cortical layer. Both poles are intact. Joint space is reduced posteriorly by the posterior-superiorization of the condyle. Reduction of the disc is noted upon opening with 2-3 mm disc space noted. Translation is WNL.

# Tomograph Interpretation of TM Joints

- **Right:** Condylar head displayed marked degeneration and flattening of the condylar head with “beaking.”
- Posterior joint space is collapsed with cortical breakdown of the condyle. Translation was 2 mm with no reduction of the disc.

# Diagnosis

- Right Non-reducing discal subluxation with cortical breakdown of the condylar head (beaking) and posterior-superiorization of the degenerative head.
- Translation is minimal at 2mm.
- Right temporomandibular joint capsulitis
- Right myalgia of masticatory muscles

# Diagnosis, continued

- MPD- Trigger points and myofascial pain dysfunction with pain referral patterns.
- Postural concerns with anterior head posture and kyphotic spinal alterations
- Patient advised that orthotics and physical therapy will be preferred course of actions, and a 25% possibility of joint rehabilitation surgery existed.

# Treatment Objectives

- Reduce joint inflammation
- Reduce myalgia
- Decrease headaches
- Reduce TMJ and facial Pain
- Restore Mandibular ROM
- Reduce trigger point areas
- Restore proper muscle joint function
- Return Patient to regular diet.

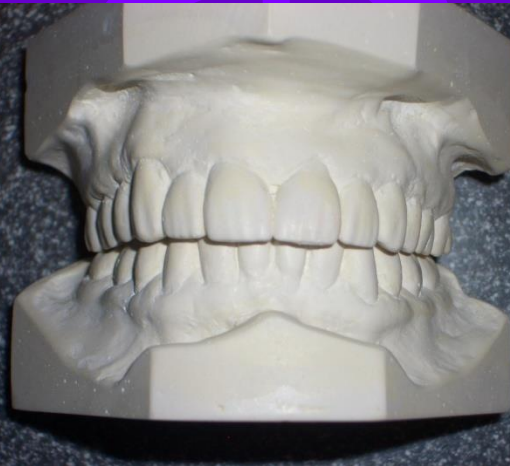
# Treatment Plan

- Respect the patient's attitude which was anti-surgery and as holistic as possible; patient advised of limited results
- Use of an Oral orthotic full time with posterior pivot appliance to increase joint spacing and decompress the right posterior band. A deprogrammer was a possibility
- Mirror alignment exercises for symmetric opening
- Spray and stretch
- Postural exercises

# Treatment Plan, continued

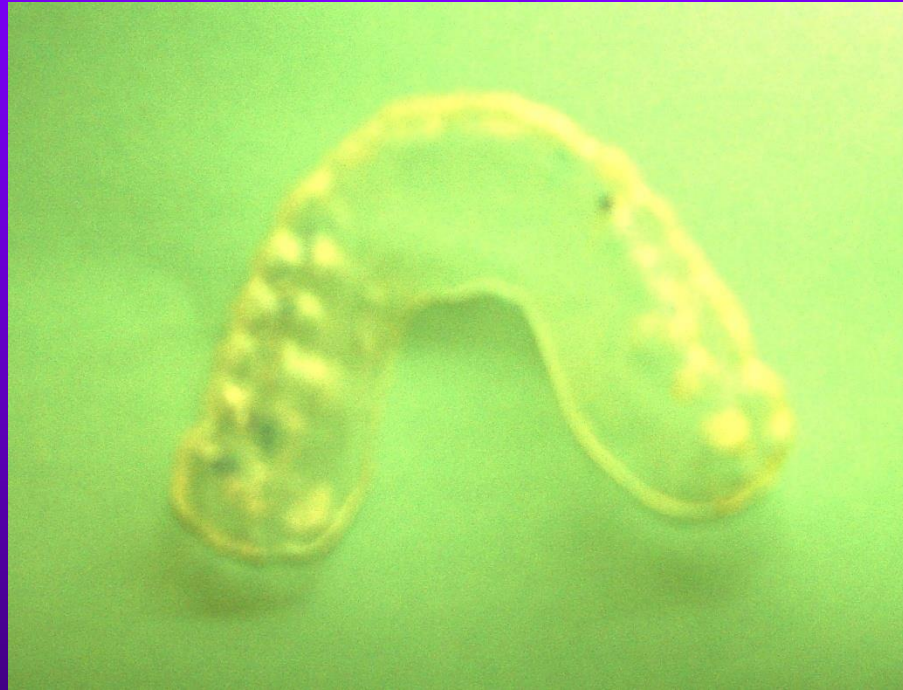
- Possible physical therapy for the cervical-cranial complex
- The patient was instructed that continuous wearing of the orthotic was required
- Soft diet
- Moist heat alternated with cold
- Prescription Motrin
- MMI would be in 3-5 months at 6 visits

# Patient's Models





# The Orthotic Appliance



# Treatment: January - February 2008

- 01-22-08 Initial Examination and diagnosis.
- 02-03-08 Seated bite plane. Height increased on right to balance posterior pivot appliance. Vertical balance against lower orthodontic retainer. Home care instructions provided.
- 02-24-08 Jaw stiffness better, no locking. Still has pain with function but reduced. Patient has sensitivity of upper teeth and jaw feels tired. Ear “fullness” gone. No referral pain to teeth or sinuses. 32 mm opening. Posterior orthotic occlusion balanced.

# Treatment: March 2008

- 3-13-08 Patient still has slight pain and still deviating to the right 2 mm. Add anterior positioner to balance opening motion.
- Patient given mirror exercise and careful instruction by me and my Certified TMJ Assistant.

# Treatment:

## April 2008

- 4-03-08 Patient doing midline exercises – deviation to 1 mm right. Upper teeth are aching and neck hurts. She states that she is working too hard. Adjust anterior positioner.
- 4-24-08 Patient thinks she is doing well. “A lot less pain. Midline opening with no deviation. Equilibrate teeth 11, 12, and 20. Observe for final equilibration in 3 weeks .

# Treatment:

## May & November 2008

- 5-14-08 TMJ feeling better . Wearing plane only at night. Check, no equilibration necessary. Check in 6 months
- 11-3 -08 Patient reports opening with no pain at 44 mm. No deviation and no referral pain. Patient wearing plane at night. No problems. Check in 6 months

# Treatment: Successful Result

- 05-12-09: Patient reports no pain. No tenderness on palpation.
- Opening at 44 mm with no deviation.
- No additional equilibration required.
- Check patient in 6 months.

Patient Photo:  
Front View

# In Summary

After experiencing two rounds of orthodontia and coming to the office with a substantial fear of the need for surgery, this patient was able to achieve a successful result through careful diagnosis, orthotic mandibular repositioning and exercise.



Photo of  
dentist and staff

*Doctor and his two  
Certified TMJ Assistants.*