Print Form

ABCP Diplomate Application: Exhibit F

Case Defense: Internal Derangement Patient Record Summary (2 of 3)

AMERICAN BOARD OF CRANIOFACIAL PAIN
2574 Oak Trails Dr
Aurora, IL 60506
USA
Phone: 630-735-1405
Fax: 406. 5872451
www.abcfp.org

Candidate Name:	██████
SSN:	██████
Application Date:	November 10, 2013

Padent Name (or code):	██████
Date Treatment Began:	05-01-13
Date Treatment Ended:	7-30-13

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 e,cam 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,

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

Other Documentation (please //sf):

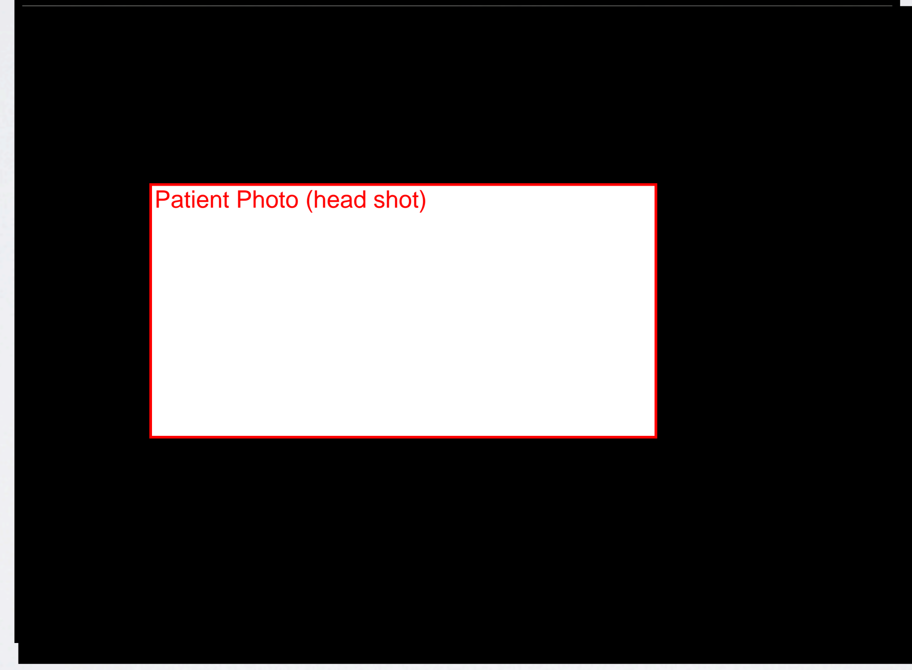
Provide a brief description of this case (15 words or less/:

Internal derangement
- Anterior di!< displacement without reduction, capsulitis, and limited opening
- **Conservative therapeutic treatment included two orthotics, cold laser therapy, prolotherapy, and patient education**
- **Patient successfullyweaned from daytime orthotic**

CASE DEFENSE # 1

Internal Derangement Patient

28 year old female



MEDICAL HISTORY

Reason(s) for this appointment: ☒Pain ☐Sleep/Airway ☐General Dental ☐Orthodontics ☐Unknow

WHAT IS THE CHIEF COMPLAINT FOR WHICH YOU ARE SEEKING TREATMENT IN OUR OFFICE

NOTE-PLEASE IDENTIFY YOUR CHIEF COMPLAINT AS #1, LIST ALL OTHER SYMPTOMS IN PRIORITY #2-9.

#	Symptom	Recent	Chronic (6 mo.+)
___	Headache pain	☐	☐
3	Ear pain	☐	☒
5	Jaw pain	☐	☒
___	Pain when chewing	☐	☐
___	Facial pain	☐	☐
___	Eye pain	☐	☐
___	Throat pain	☐	☐
___	Neck pain	☐	☐
___	Shoulder pain	☐	☐
___	Back pain	☐	☐
2	Limited ability to open mouth	☐	☒
1	Jaw joint locking	☐	☒
4	Jaw joint noises	☐	☒
___	Ear congestion	☐	☐
___	Sinus congestion	☐	☐
___	Dizziness	☐	☐
___	Tinnitus (ringing in the ears)	☐	☐
___	Muscle twitching	☐	☐
___	Vision problems	☐	☐
___	Other: ________	☐	☐

#	Symptom	Recent	Chronic (6 mo.
___	Kicking or jerking leg repeatedly	☐	☐
___	Swelling in ankles or feet	☐	☐
___	Morning Hoarseness	☐	☐
___	Dry mouth upon waking	☐	☐
___	Fatigue	☐	☐
___	Difficulty falling asleep	☐	☐
___	Tossing and turning frequently	☐	☐
___	Repeated awakening	☐	☐
___	Feeling unrefreshed in the morning	☐	☐
___	Significant daytime drowsiness	☐	☐
___	Frequent heavy snoring	☐	☐
___	Affects sleep of others	☐	☐
___	Gasping when waking	☐	☐
___	Told that "I stop breathing" during sleep	☐	☐
___	Night-time choking spells	☐	☐
___	Unable to tolerate C-Pap	☐	☐
___	Tooth grinding	☐	☐
___	Teeth crowding	☐	☐

Do you have concerns in any of these areas: ☐ General Appearance ☐ Overbite ☒ Ability to Function ☐ Smile

Other Comments: When I talk for long periods of time it is harder to close mouth. Jaw does not seem to fit together right. In 2009 a dental hygienist hurt my jaw after which it popped until the most recent issue. I was on break when ,y jaw was re

Do any of the above complaints or concerns affect your daily life? eating sometimes

WHAT ARE THE RESULTS YOU ARE SEEKING FROM TREATMENT?

I want to prevent my jaw from getting more messed up and have it align correctly

*Jaw Joint Noises - "not anymore now I just have limited ability to open"

MEDICAL HISTORY

ALLERGIC REACTIONS

Please check any and all medications or substances that have caused an allergic reaction

- ☐ Anesthetics
- ☐ Antibiotics
- ☐ Aspirin
- ☐ Barbituates
- ☐ Codeine
- ☐ Iodine
- ☐ Penicillin
- ☐ Plastic
- ☐ Sedatives
- ☐ Sulfa

Other: ______

No allergies

CURRENT MEDICATIONS ☐ (Patient Medication list is attached)

Please list all medications you are taking and the reason you take them. Include all over-the-counter medications, vitamins, herbs, etc.

Medication	Dosage	Reason for Taking
Ibuprofen	400mg	3x a month for pain

☐ See attached list

PREVIOUS TREATMENTS/MEDICATIONS FOR THE CONDITION WE ARE EVALUATING

Treatment and/or Medication	Doctor/Provider Name	Approximate Date of Treatment
MRI suggestion	[redacted]	Suggested in 2010 but didnt happen because
Retainer	[redacted]	2009 dentist thought the popping could be fr

I release and give my permission for this office to request information and communicate with the providers listed above.

Patient Signature: ______ Date: ______

Parent/Guardian Signature (if patient is a minor): ______ Date: ______

HEALTH AND MEDICAL HISTORY

- ☐ No Are
- ☐ No Hav
- ☐ No Do y
- ☒ Yes Hav
- ☐ No Trouble breathing through nose

Orthodontic Treatment in Past

MEDICAL HISTORY

HEALTH AND MEDICAL HISTORY (CONTINUED)

Do you have, or have you experienced any of the following:

- ☐ No — Heart Disorder/ Heart Attack
- ☐ No — Heart Murmur
- ☐ No — Mitral Valve prolapse
- ☐ No — Heart Pacemaker
- ☐ No — Heart Palpitations
- ☐ No — Heart Valve Replacement
- ☐ No — Irregular Heartbeat
- ☐ No — Blood Pressure ☐ High ☐ Low
- ☐ No — Stroke
- ☐ No — Bleeding Easily
- ☐ No — Bruising Easily
- ☐ No — Cancer of ________ Chemo ☐ Radiation ☐
- ☐ No — Anemia
- ☐ No — Asthma
- ☐ No — Glaucoma
- ☒ Yes — Gastroesophageal Reflux (Gerd) ★
- ☐ No — Hemophilia
- ☐ No — Hepatitis
- ☐ No — History of Substance Abuse
- ☐ No — Hypoglycemia
- ☐ No — Huntington's Disease
- ☐ No — Kidney Disease
- ☐ No — Liver Disease
- ☐ No — Leukemia
- ☐ No — Migraines
- ☐ No — Meniere's Disease
- ☐ No — Multiple Sclerosis
- ☐ No — Muscular Dystrophy
- ☐ No — Neuralgia
- ☐ No — Osteoarthritis
- ☐ No — Osteoporosis
- ☐ No — Ovarian Cyst
- ☐ No — Parkinson's Disease
- ☐ No — Rheumatic Fever
- ☐ No — Rheumatoid Arthritis
- ☐ No — Scarlet Fever

- ☐ No — Thyroid Problem
- ☐ No — Tuberculosis
- ☐ No — Intestinal Disorder
- ☐ No — Nervous System Disorder
- ☒ Yes — Anxiety ★
- ☐ No — Skin Disorder
- ☐ No — Urinary Tract Disorder
- ☐ No — Chronic Fatigue
- ☐ No — Fibromyalgia
- ☐ No — Cold hands and feet
- ☒ Yes — Depression ★
- ☐ No — Difficulty concentrating
- ☐ No — Difficulty breathing at night for sleep
- ☐ No — Dizziness
- ☐ No — Excessive Thirst
- ☐ No — Frequent ear infections
- ☐ No — Frequent sore throat
- ☐ No — Frequent awaking at night - number of times ____
- ☐ No — Hearing impairment
- ☐ No — Memory Loss
- ☐ No — Hay Fever
- ☐ No — Insomnia
- ☐ No — Muscle aches
- ☐ No — Muscle fatigue
- ☐ No — Muscle spasms
- ☐ No — Muscle tremors
- ☐ No — Poor circulation
- ☐ No — Psychiatric Care
- ☐ No — Recent weight gain
- ☐ No — Recent weight loss
- ☐ No — Sinus problems
- ☐ No — Shortness of breath
- ☐ No — Slow healing sores
- ☐ No — Speech difficulties
- ☐ No — Swollen, stiff or painful joints
- ☐ No — Tired muscles

*Only when busy with school

MEDICAL HISTORY

CURRENT SYMPTOMS

Please identify the level of the head, ear or facial pain (1-lowest, 10- highest) 9

Pretreatment VAS = 9

Head Pain

Location (L=Left R=Right B=Bilateral)	Recent	Chronic (over 6 mo.)	Severity: Mild	Mod	Severe	Duration: Min.	Hrs.	Days	Frequency: Occasional	Frequent	Constant
L☐R☐B☐ Frontal (Forehead)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
L☐R☐B☐ Generalized	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
L☐R☐B☐ Parietal (Top of head)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
L☐R☐B☐ Occipital (Back of head)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
L☐R☐B☐ Temporal (Temple area)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Do you have pain or discomfort in any of the following areas? If so, please indicate the approximate date the pain be

Jaw Pain ★
- ☒L ☐R Jaw pain with opening
- ☒L ☐R Jaw pain when chewing
- ☐L ☐R Jaw pain at rest

Jaw Joint Sounds
- ☒L ☒R Jaw sounds with opening
- ☐L ☐R Jaw sounds when chewing
- ☐L ☐R Jaw sounds at rest

"made sounds in past now I just can't open all the way"

Jaw Locking ★
- ☒Yes ☐No Jaw locks closed
- ☐Yes ☒No Jaw locks open

Jaw Joint Symptoms
- ☒Yes ☐No Teeth clenching ☒Day ☐Night
- ☐Yes ☒No Teeth grinding ☐Day ☐Night

Eye Related Conditions
- ☐Yes ☒No Blurred vision
- ☐Yes ☒No Double vision
- ☐Yes ☒No Eye pain
- ☐Yes ☒No Pain or pressure behind the eyes
- ☐Yes ☒No Extreme sensitivity to light (photophobia)
- ☒Yes ☐No Wear of glasses or contact lenses

Ear Related Conditions
- ☐L ☐R Buzzing in the ears
- ☒L ☒R Ear congestion
- ☐L ☐R Ear pain
- ☐L ☐R Hearing loss
- ☐Yes ☒No Itchiness or Stuffiness in ears
- ☐L ☐R Pain behind the ear
- ☐L ☐R Pain in front of the ear
- ☐L ☐R Recurrent ear infections
- ☐L ☐R Ringing in the ear (Tinnitus)

Throat Related Conditions
- ☐Yes ☒No Chronic sore throat
- ☐Yes ☒No Difficulty swallowing
- ☐Yes ☒No Swollen glands
- ☐Yes ☒No Thyroid enlargement
- ☐Yes ☒No Tightness in throat
- ☐Yes ☒No Constant feeling of a foreign object in throat

Neck Related Conditions
- ☐Yes ☒No Limited movement of neck
- ☐Yes ☒No Neck pain
- ☐Yes ☒No Numbness in hands or fingers
- ☐Yes ☒No Swelling in the neck

MEDICAL HISTORY

Shoulder Related Conditions

- ☐ Yes ☒ No Shoulder pain
- ☐ Yes ☒ No Shoulder stiffness
- ☐ Yes ☒ No Tingling in hands or fingers

Back Related Conditions

- ☐ Yes ☒ No Back pain - lower
- ☐ Yes ☒ No Back pain - middle
- ☐ Yes ☒ No Back pain - upper
- ☐ Yes ☒ No Sciatica
- ☐ Yes ☒ No Scoliosis

Mouth and Nose Related Conditions

- ☐ Yes ☒ No Dry mouth
- ☐ Yes ☒ No Chronic sinusitis
- ☐ Yes ☒ No Frequent snoring
- ☐ Yes ☒ No Burning tongue
- ☐ Yes ☒ No Broken teeth
- ☐ Yes ☒ No Frequent biting of the cheek

Sleep Conditions Please select Yes or No answers based on your average sleep experience and/or what a sleep partner has told you

Sleep Positions ☐ Side ☐ Back ☐ Stomach ☒ Varies

Is it easy to fall asleep? ☒ Yes ☐ No

Do you feel rested upon AM waking? ☐ Yes ☒ No

Stopped breathing during sleep? ☐ Yes ☒ No

Average hours of sleep per night? 6.5

Do you wake often during the night? ☐ Yes ☒ No

Gasping or Choking during sleep? ☐ Yes ☒ No

Have you ever had a Sleep Study (PSG)? ☐ Yes ☒ No

Result was ______

HISTORY OF SYMPTOMS

On what date, or approximate date, did this condition or symptoms first occur? April 2009

☐ Yes ☒ No **Does any family member have the same or similar problem? If yes, please explain.** ______

Can you relate your pain or condition to a motor vehicle accident or traumatic injury? Dentl hygienist opened jaw too wide when putt

If yes, please complete Trauma History Section, enclosed as a separate form.

- April 2009 a bite block was used to clean her teeth and after that is when she first noticed noises in her TMJ's
- Stopped noticing noises and had limited opening

Objective

CLINICAL EXAM

Date of Examination: 03/27/2013

☒ Review of Questionnaire ☒ Signatures Noted ☒ Allergies Noted ☒ Medication Noted

Vitals:

Neck 14 **Height** 5'3.5" **Weight** 130 **BMI** 22.67 **B.P.** 118/77 **Pulse** 70 **Respirations** 0 **Temp** 0

A. Mandibular Ranges of Motion Measurements ☐ Not Performed

Maximum opening without pain ★	37 mm	Maximum opening with pain	37 mm	Maximum left lateral excursion ★	3 mm
Maximum right lateral excursion	9 mm	Maximum protrusion	7 mm	Deflection to the left	1 mm
Deflection to the right	0 mm	Deviation to the left	0 mm	Deviation to the right	2 mm

Normal ranges of motion based on cranial skeletal types are: 42-52 mm maximum opening, 8-12 mm protrusive, and 10-14 mm of lateral movement both right and left [1]

B. Dental Classifications and Relationships ☐ Not Performed

Dental Molar L Class 1, Division ☐

Overjet (horizontal overlap) 3 mm, normal range 1-2 mm

Mandibular dental midline deviation: left 0 mm, right 0 mm

Maxillary dental midline deviation: left 0 mm, right 0 mm

Dental Molar R Class 1, Division ☐

Overbite (vertical overlap) 3 mm, normal range 1-2 mm

Mandibular skeletal midline deviation: left 0 mm, right 0 mm

Maxillary skeletal midline deviation: left 0 mm, right 0 mm

Skeletal Class: Class I ☒ Class II ☐ Class III ☐ ☐ Crossbites Present

Crowding Upper: ☐Mild ☐Mod ☐Severe Lower: ☐Mild ☐Mod ☐Severe

Spacing Upper: ☐Mild ☐Mod ☐Severe Lower: ☐Mild ☐Mod ☐Severe

Posterior Openbite: left 0 mm, right 0 mm CEJ to CEJ 20 mm Tongue thrust: anterior ☒, lateral ☒

Anterior Openbite: left 1 mm, right 0 mm

*Grummons, Duanne. Orthodontics for the TMJ/TMD Patient.

CLINICAL EXAM

C. Dental Examination ☐ Not Performed

Missing teeth: 1,16,17,32 | Mobile teeth: | Sensitivity:
Caries: large / deep: | Caries: small / superficial: | Attrition:
Fractured / trauma: | Damaged restoration: | Periodontal Disease:
When: | When: | Hygiene ☒ Good ☐ Fair ☐ Poor

D. Oral Prosthetics ☐ Not Performed

Complete Dentures: Upper ☐ , Lower ☐ Partial Dentures: Upper ☐ , Lower ☐

E. Oral Appliances Currently Used ☐ Not Performed

Night guard (full coverage)
hard ☐, soft ☐
upper ☐, lower ☐

Athletic appliances ☐

NTI ☐

Positioned appliances: upper ☐, lower ☐

C PAP
☐ Compliant
☐ Intolerant

Sleep Airway Appliances
Describe:

F. Cervical Ranges of Motion ☐ Not Performed

Seated left rotation 70 degrees — Pain? Yes ☐ No ☒
Seated right rotation 85 degrees — Pain? Yes ☐ No ☒
Flexion 55 degrees — Pain? Yes ☐ No ☒
Extension 55 degrees — Pain? Yes ☐ No ☒

Normal ranges of motion are 85-90° of rotation, 55-60° of flexion and extension.

*Hoppenfeld, Stanley. Physical Examination of the Spine and Extremities

POSTURE EVALUATION

G. Photographs ☐ **Not Performed**

Full Face: ☐ **with tongue blade** ☐ **without tongue blade** ☒ **both**

Facial asymmetry ☒ Occlusal cant up to left ☐ Occulusal cant up to right ☐

Ear left externally rotated ☐ Ear left internally rotated ☐

Ear right externally rotated ☐ Ear right internally rotated ☐

Standing Posture: ☒ Frontal ☒ Sagittal ☐ Back **Revealed the following:**

Forward head posture: ☒ Head tilt: left ☒ right ☐ Shoulder cant: up to left ☒ up to right ☐

Shoulder rolled forward: left ☐ right ☐ both ☐ Hip cant: up to left ☒ up to right ☐ Feet Divergent: left ☐ right ☒ both ☐

Other:

TM Joint Vibration Analysis (Hard and Soft Tissue Evaluation in Function)

Taken ☐ Printed ☐

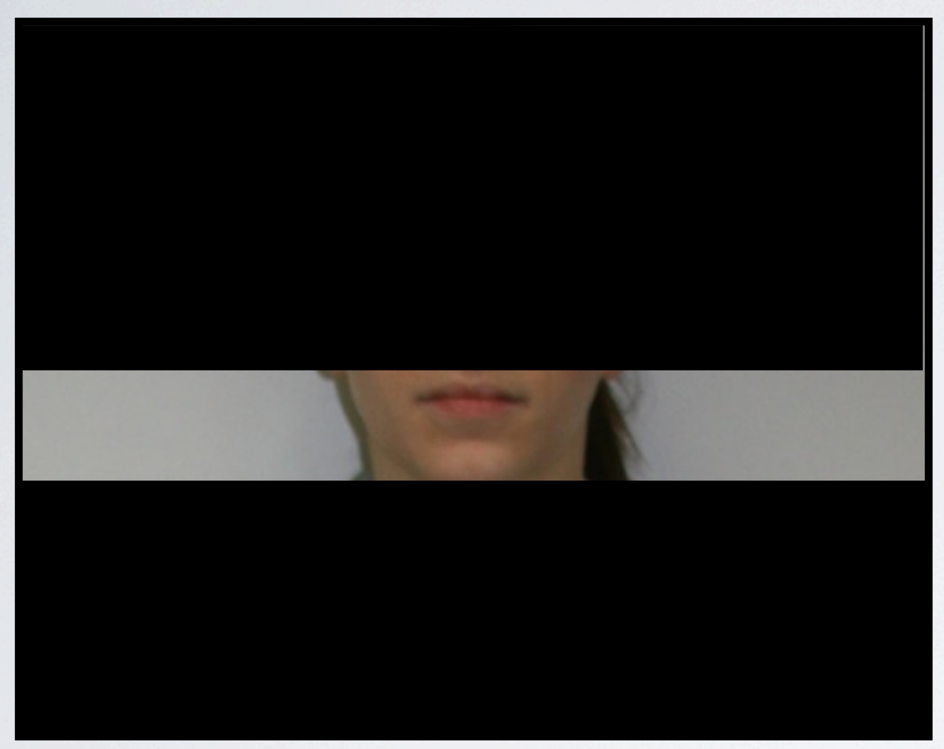
II. Doctor's Evaluation

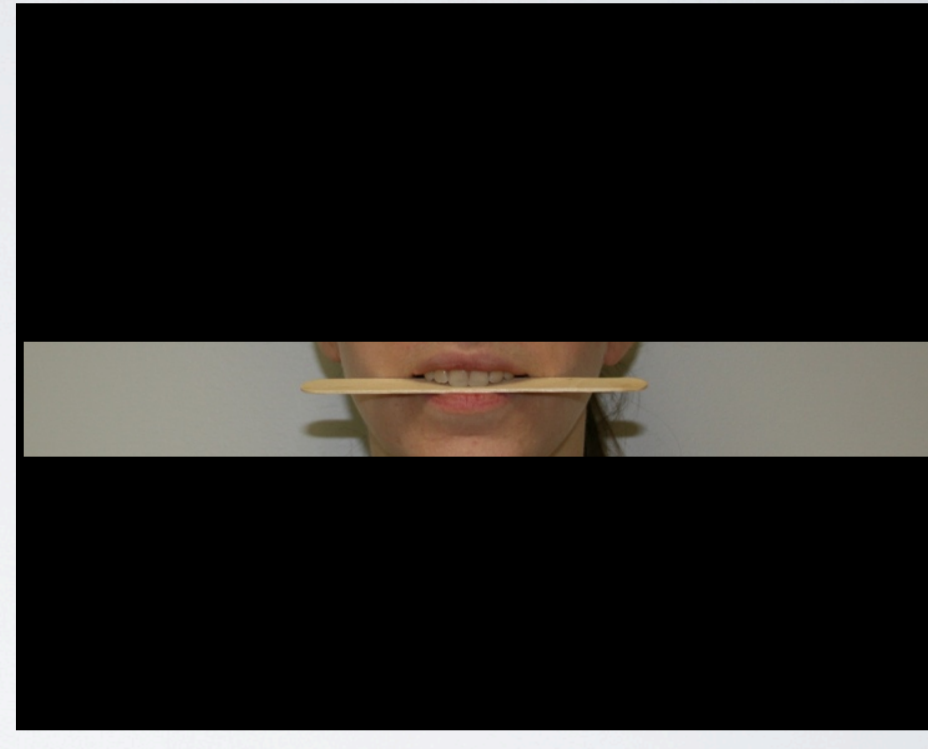
A. Limited Opening Evaluation ☐ **Not Performed**

Soft end feel ☐ Hard end feel ☒

Hard end feel would be consistent with Anterior Disc Displacement Without Reduction

POSTURE EVALUATION





*Fonder, A.C. The Role of the Dental Physician.
*Fonder, A.C. Dental Distress, Respiratory, and Posture Problems.

POSTURE EVALUATION

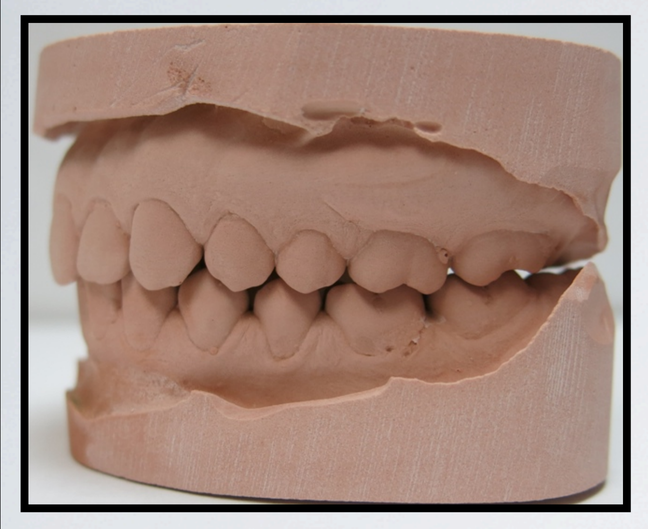
Patient Standing;
Left Side View

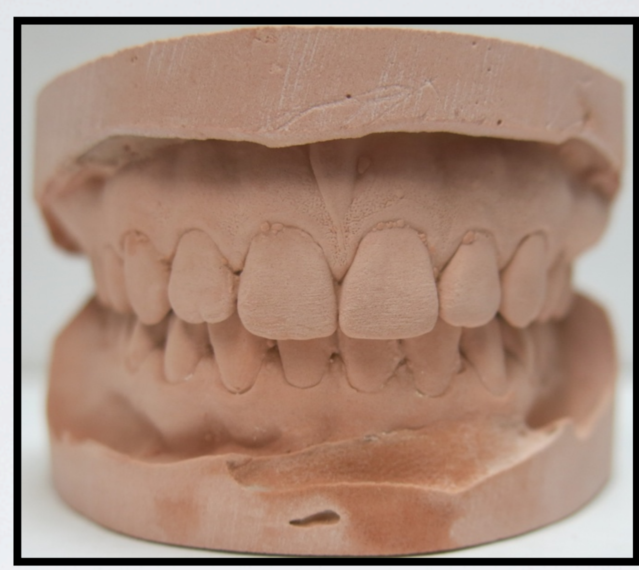
Patient Standing;
Front View

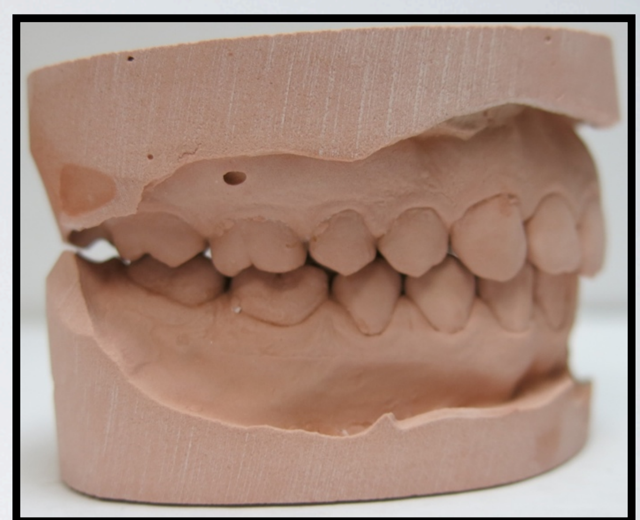
Patient Standing;
Right Side View

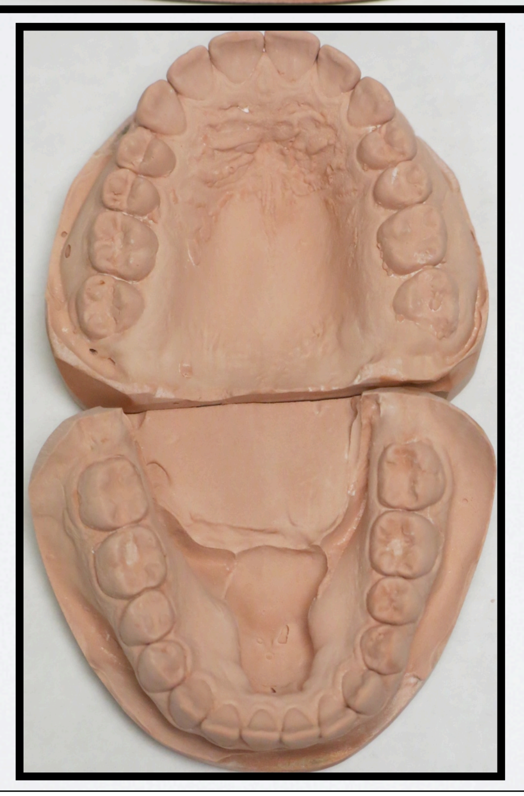
*Fonder, A.C. The Role of the Dental Physician.
*Fonder, A.C. Dental Distress, Respiratory, and Posture Problems.

CLINICAL MODELS









SLEEP & AIRWAY EVALUATION

C. Sleeping and Airway Evaluation

[ ] Not Performed

Epworth rating: 4

Can the patient get to sleep easily?	Yes [X]	No [ ]		
Can the patient stay asleep throughout the night?	Yes [X]	No [ ]		
Does the patient wake rested?	Yes [X]	No [ ]		
What is the patient's sleeping position?	Back [ ]	Side [ ]	Stomach [ ]	Varies [X]
Tonsils	Absent [ ]	Purulent [ ]	WNL [X]	

Hypertrophied pharyngeal tonsils:

- Left-category 1 [ ] 2 [X] 3 [ ] 4 [ ]
- Right-category 1 [ ] 2 [X] 3 [ ] 4 [ ]

Palato-glossus & Palato-pharyngeal walls:

- Left-category 1 [ ] 2 [ ] 3 [X] 4 [ ]
- Right-category 1 [ ] 2 [ ] 3 [X] 4 [ ]

Mallampati *(tongue height)*

- [ ] Class 1
- [ ] Class 2
- [ ] Class 3
- [X] Class 4

Adenoids
- [ ] Present
- [ ] Absent
- [ ] Obstructive
- [ ] Purulent
- [X] Within normal limits

Uvula
- [ ] Elongated
- [ ] Absent
- [ ] Edematous
- [ ] Enlarged
- [ ] Obstructs airway
- [X] Within normal limits

Soft Palate
- [ ] Firm
- [ ] Loss of tone
- [ ] Appears to obstruct airway
- [ ] Low draping
- [X] Within normal limits

Gag Reflex
- [ ] Firm
- [ ] Exaggerated
- [X] Within normal limits

INTRA-ORAL EVALUATION

D. Dental Occlusal Evaluation

☐ Not Performed

	Location
☒ Within normal limits	
☐ Occlusal prematurity	
☐ Protrusive interferences	
☐ Distalizing contacts	

☐ Dysfunctional right lateral mandibular movement. Describe:

☐ Dysfunctional left lateral mandibular movement. Describe:

E. Gross Intra-oral Examination

☐ Not Performed

Tongue	Location
☒ Scalloping of tongue	
☐ Swollen or painful tongue	
☐ Coated	
☒ Enlarged	
☐ Reddened	
☐ Fissured	
☐ Geographic	
☒ Tongue thrust	
☐ Ankyloglossia (tongue-tie)	
☒ Tongue posture above occlusal plane	
☒ Retracts into airway on opening	
☐ Protrusion on opening	
☐ Within normal limits	

Other	Location
☐ Ulcer	
☐ Abcess	
☐ Gingival inflammation	
☐ Gingival recession	
☐ Loss of attached tissue	
☐ Hyperkeratosis of buccal mucosa	
☒ Tori	Mandibular to
☐ Swollen or painful salivary glands	
☐ Swollen or painful tonsils	
☐ Palate abnormalitites.	List:
☐ Floor of the mouth abnormalities.	List:
☐ Other abnormalities.	List:

Maxilla - Level of hard palate: ☒WNL ☐Vaulted ☐Moderately Vaulted ☐Narrow ☐Micrognathia

Mandible - ☒ WNL ☐Narrow ☐Micrognathia

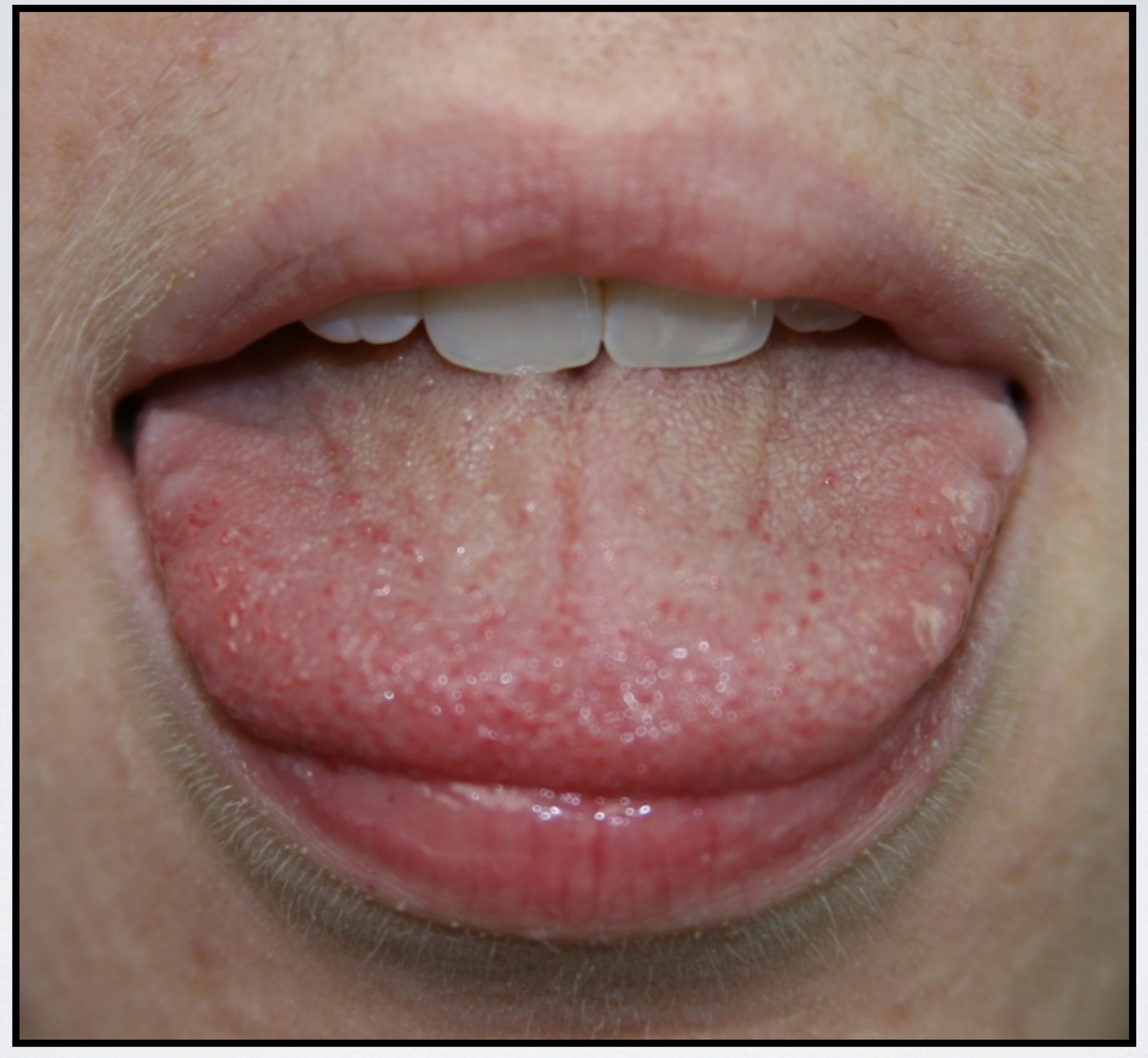
Other:

F. Cranial Nerve Exam

☐ Not Performed

☒ Cranial nerve examination was within normal limits

TONGUE SCALLOPING



*Weiss, Atanasov, Calhoun. Otolaryngology Head Neck Surgery 2005. The association of tongue scalloping with obstructive sleep apnea and related sleep pathology.

MUSCLE PALPATIONS

0 = No Tenderness, 1 = Mild Tenderness, 2 - Moderate Pain, 3 - Severe Pain

Muscles

Muscles	Left	Right
Anterior Temporalis	1	0
Middle Temporalis	1	1
Posterior Temporalis	0	0
Lateral Temporomandibular Capsule	2	2
Posterior Joint space	2	2
Deep Masseter	0	0
Superficial Masseter	0	0
Stylomandibular Ligament	0	0
Sternocleidomastoid	1	1
Styloid Process	0	0
Trapezius insertion at occiput	2	0
Greater Occipital	2	0
Splenius Capitis	2	0
Lesser Occipital	2	0
Greater Auricular Nerve	0	0
Trapezius Neck Area	1	1
Trapezius Shoulder Area	1	0
Cervical Vertebra ___ Level	0	___ Level 0
Anterior Digastric	0	
Temporal Tendon insertion on ramus	0	0
Medial Pterygoid	2	1
Buccinator Origin	1	0
Buccinator Insertion	0	0
Vertex	0	0
Gland		
Parotid Gland	0	0
Sublingual Gland	0	0
Submandibular Gland	0	0
Other: ___		

*Simmons III, Gibbs. 2005 Journal of Craniomandibular Practice.
*Fonder, A.C. The Role of the Dental Physician.
*Fonder, A.C. Dental Distress, Respiratory, and Posture Problems.

CLINICAL EXAM

H. TM Joint Sounds *(Vibrations significant enough to displace air produce sound)* ☐ **Not Performed**

1. Sonography 2. Doppler 3. Stethoscopic 4. Unassisted Hearing

☐ Opening click Right ☐ Early ☐ Middle ☐ Late ☐

No joint noises currently however, history of noises in past

☐ Opening crepitus Right ☐ Left ☐

☐ Closing crepitus Right ☐ Left ☐

I. Motor Reflex Testing *(Evaluation of structural injury that produces posture avoidance mechanisms, loss of balance)* ☐ **Not Performed**

Wall Test

- ☐ Negative away from wall, consistent without structural injury posture avoidance
- ☒ Positive away from wall, consistent with structural injury posture avoidance
- ☐ Negative against wall, consistent with an injury above the waist
- ☐ Positive against wall, consistent with an injury at the waist or below
- ☒ Stabilized (return of balance) with 2 tongue blade/blades away from the wall, consistent with TM joint as primary reason for postural instability.

Parachute Test

- ☐ Negative for scratching, consistent with TM joint not triggering a sympathetic response
- ☒ Positive for scratching, consistent with a TM joint that is stimulating a sympathetic response
- ☒ Stabilized with 2 tongue blade/blades, consistent with an injured/inflamed TM joint

Dark / Light Test

- ☐ Negative, able to hold arm position while looking at a black field, consistent with normal response
- ☒ Positive, unable to hold arm position while looking at a black field, consistent with autonomic dystrophy
- ☒ Stabilized with 2 tongue blade/blades, consistent with TM joint decompression to change neurologic response

*400 References available for Motor Nerve Reflex Testing

IMAGING

III. Imaging and Testing for Completing Diagnosis-PRE TREATMENT

EDIT ICON APPEARS IN SOFTWARE FOR IMAGING EXAMINATION FINDINGS SCREEN
OR PRINT HARD COPIES FROM FORMS INDEX

KEY: B = *Brought in by patient* P = *Performed on site today* O = *Ordered from outside laboratory*

Scans
- ☐ CT B☐ P☐ O☐
- ☐ Arthrogram B☐ P☐ O☐
- ☐ Angiography B☐ P☐ O☐

MRI
- ☒ TMJ right☐ left☐ bilateral☒ B☐ P☐ O☒
- ☐ Brain B☐ P☐ O☐

X-rays
- ☒ Sagittal Tomograms B☐ P☒ O☐
- ☒ AP Tomograms B☐ P☒ O☐
- ☒ Panoramic B☐ P☒ O☐
- ☐ Lateral cervical spine B☐ P☐ O☐
- ☐ Frontal PA Skull B☐ P☐ O☐
- ☐ Para-nasal sinus B☐ P☐ O☐

Airway Evaluation
- ☐ Pharyngometer (laryngeal study) B☐ P☐ O☐
- ☐ Rhinometer (nasal function study) B☐ P☐ O☐
- ☐ Overnight Pulse Oximetry B☐ P☐ O☐
- ☐ Attended Sleep Study (Polysomnography, PSG) B☐ P☐ O☐
- ☐ Unattended Study ______ B☐ P☐ O☐

PSG Result: ______
- ☐ (See attached)

Nuclear Imaging
- ☐ Positron Emission Tomography B☐ P☐ O☐
- ☐ Bone B☐ P☐ O☐

Electromodalities
- ☐ EMG (electromyography) B☐ P☐ O☐
- ☐ Jaw Tracking (electrognathic tracing) B☐ P☐ O☐
- ☐ **JVA (Joint Vibration Analysis)** B☐ P☐ O☐
- ☐ Computerized sonography B☐ P☐ O☐
- ☐ Computerized mandibular scanning B☐ P☐ O☐

- ☐ Townes B☐ P☐ O☐
- ☐ Waters B☐ P☐ O☐
- ☐ AP cervical spine B☐ P☐ O☐
- ☐ Submental vertex B☐ P☐ O☐
- ☐ FMR B☐ P☐ O☐
- ☐ Cephalogram B☐ P☐ O☐
- ☐ Ceph Tracing B☐ P☐ O☐

Polysomnogram or Unattended Sleep Study Date ______

RDI =		longest event =	
AI =		mean O2 Sat =	
AHI =		Nadir O2 =	
Supine AHI =		PLM? Y N =	
REM AHI =		arousal index =	

CPAP titration PSG:
Pressure: ______ AHI during study = ______

MRI ORDER

April 7, 2013

To whom it may concern,

r presented to me with pain in the TMJ region. Please see my attached notes for clinical diagnosis and treatment plan. This plan may change pending the results of the MRI. I suspect that her articular discs are locked in an anterior position and want to evaluate the soft tissue regions of the TMJ complex. Patient will bring in CBCT and tongue blades for stabilization during the image.

MRI Protocol for Temporomandibular Disorders

Please obtain the following images on our patients sent for imaging of the temporomandibular joint:

1. T1 weighted or proton density sagittal oblique images with mouth closed on posterior teeth or in habitual swallowing bite.
2. T2 weighted sagittal oblique images with mouth closed on posterior teeth or in habitual swallowing bite.
3. T1 weighted or proton density coronal oblique images with mouth close on posterior teeth or in habitual swallowing bite.
4. T1 weighted or proton density sagittal oblique with mouth open using tongue blades provided as mouth prop between upper and lower incisor teeth.
5. T1 weighted or proton density coronal oblique images with mouth open using tongue blades provided as mouth prop between upper and lower incisor teeth.

All images should be bilateral. All images should be obliqued so that the sagittal oblique images are perpendicular to the long axis of the condyle and the coronal oblique images adjacent structures medial and lateral to the condyle on the sagittal images and of adjacent structures posterior and anterior to the condyle on the coronal images.

Please have the patient place the posterior teeth together (or, when no posterior teeth exist, in the habitual swallowing position, i.e., swallow and hold that jaw position) while doing closed mouth imaging. No images at jaw resting position are necessary.

The patient will bring a stack of tongue blades taped together at the appropriate thickness for the open mouth imaging. Please ask the patient to place these between the incisor teeth when the open mouth images are to be obtained. The flat side of the tongue blades should touch the upper and lower incisor teeth. The patient should be asked to open briefly to the maximum and then close on the tongue blades. This procedure and final interincisal distance should be documented in the report.

All imaging is the best performed utilizing a dedicated TMJ coil. All images should be obtained with spinecho or "fast spin-echo" or equivalent sequences. Proton density images may be substituted for T1 weight images. It is important that pixel dimensions be approximately 0.5 x 0.5 mm-i.e., ideally using a 256 x 256 matrix and FOV of 12 x 12 cm. Phase encoding steps may generally be reduced to about 200 to save imaging time. Accurate communication between the radiologist and referring dentist is vital.

Let us discuss any items or issues, such as equipment limitations, that are not completely clearly defined in the protocol.

Very sincerely,

- Patient declined recommendation for MRI due to no insurance coverage and cost

*Simmons HC, Gibbs SJ. Journal of Craniomandibular Practice 1998.A Protocol for MRI of the TMJ.

PANORAMIC

R

L

F

20130327

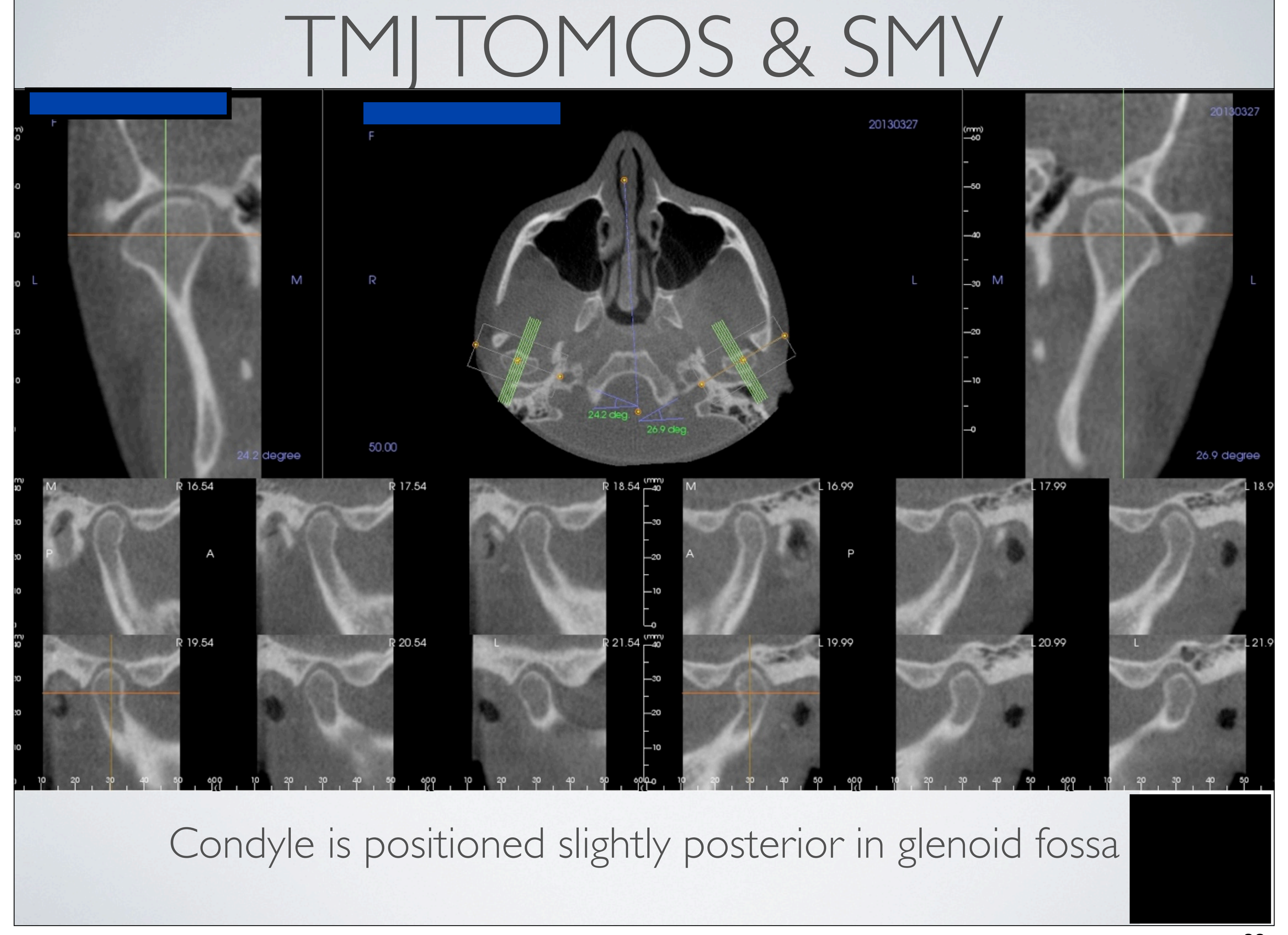
Upper-Lower Limit

Focal Trough

Preview

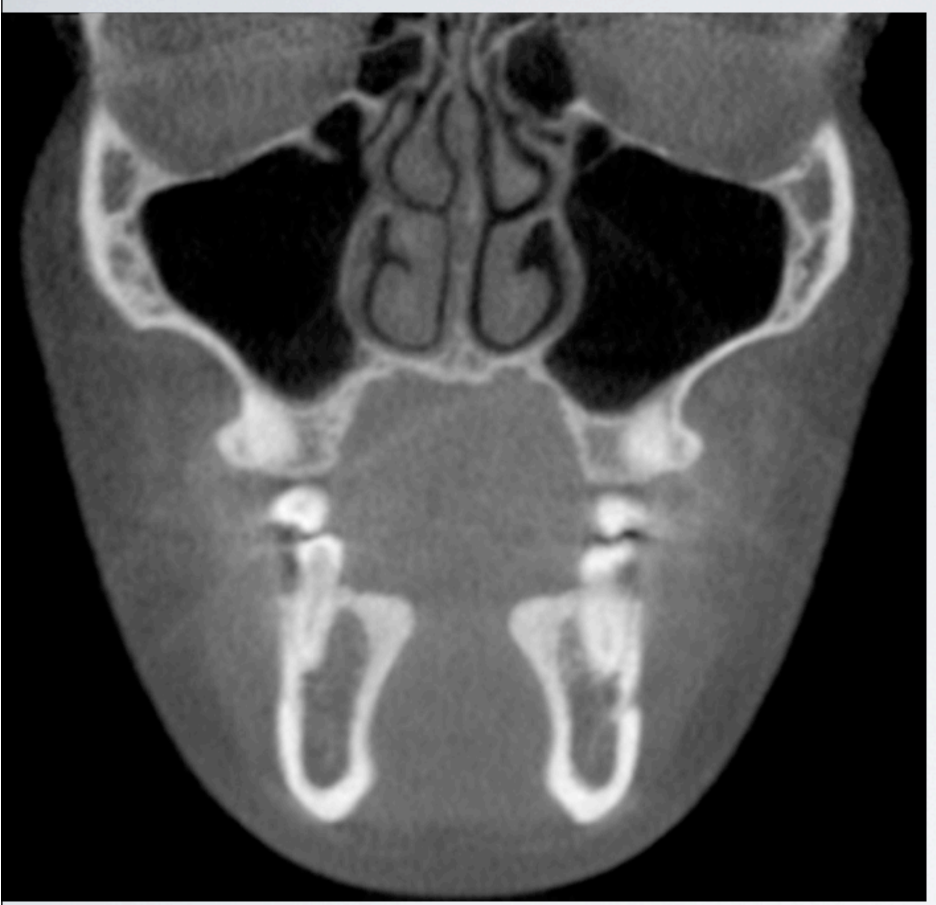
No remarkable findings

TMJ TOMOS & SMV



Condyle is positioned slightly posterior in glenoid fossa

NOSE AND AIRWAY



Cottle's Maneuver Not Effective

Total Volume: 17.2cc

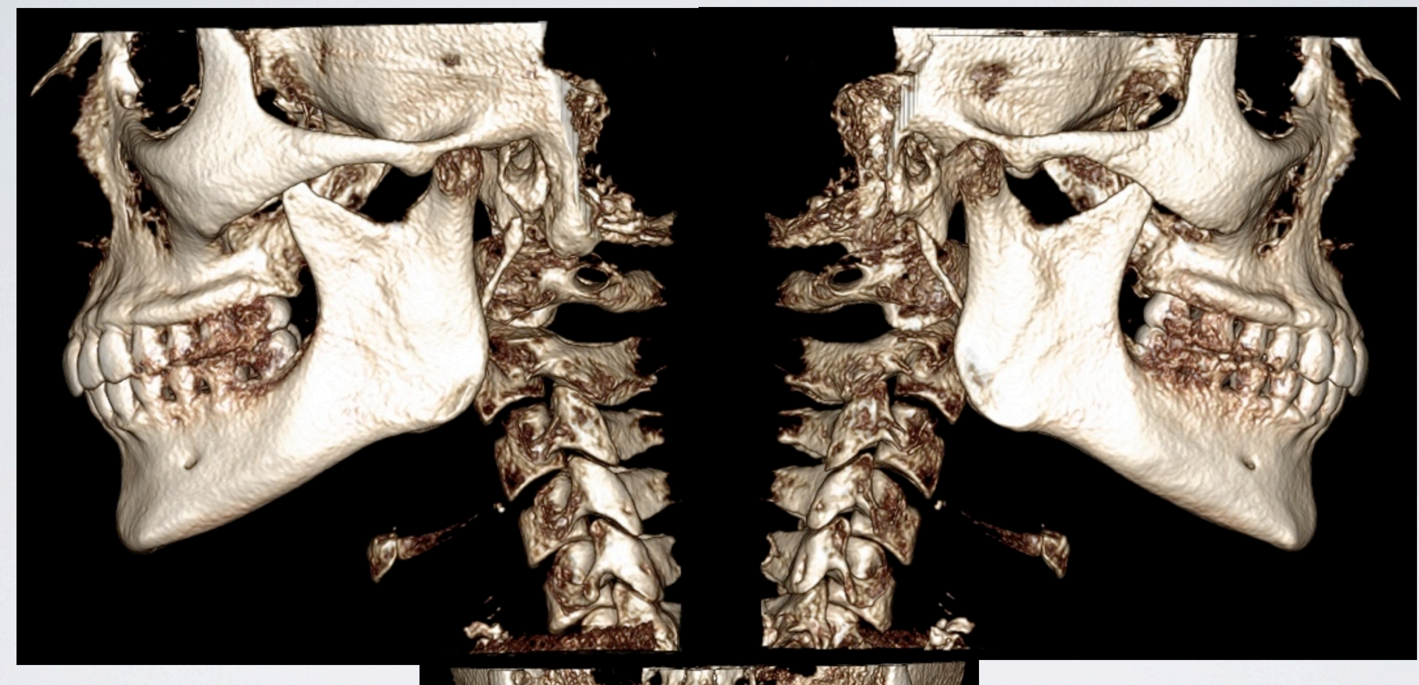
Min Area: 343.3mm2

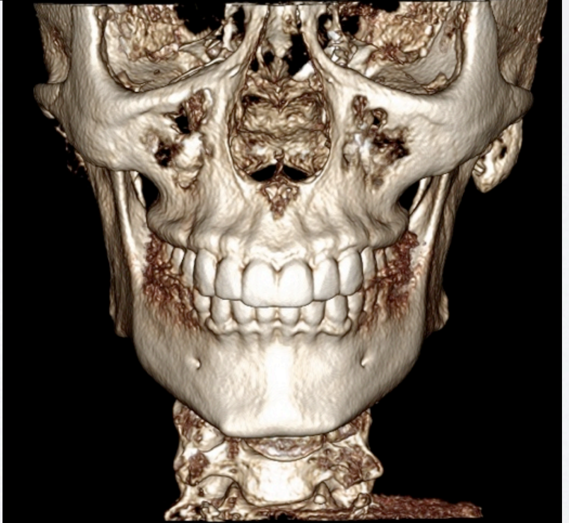
Appears to be large airway, however...

*Fitzpatrick, M.F. European Respiratory Journal. Effect of Nasal or Oral Breathing Route on Upper Airway Resistance During Sleep

*Rhee, Weaver.Otolaryngology Head and Neck Surgery.Clinical consensus statement: Diagnosis and management of nasal valve compromise.

3D RENDERING





*Fonder, A.C. The Role of the Dental Physician.
*Fonder, A.C. Dental Distress, Respiratory, and Posture Problems.

RADIOLOGY REPORT

Nasal airway:
Large right, middle, and inferior nasal turbinates within the nasal cavity. If the patient describes difficulty in breathing through the nose, clinical correlation is recommended.**
Temporomandibular assessment:

1. Degenerative changes are not associated with the right temporomandibular joint complex. The cortical borders of the right condyle, glenoid fossa, and articular eminence are smooth and continuous. In maximum intercuspation, the condyle is positioned slightly posterior within the glenoid fossa.**
2. Degenerative changes are not associated with the left temporomandibular joint complex. The cortical borders of the left condyle, glenoid fossa, and articular eminence are smooth and continuous. In maximum intercuspation the condyle is positioned slightly posterior within the glenoid fossa.**

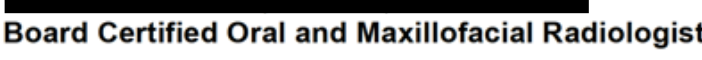
Findings/Pathology:

Otherwise, no findings/pathology was noted within the field of view.

Please contact [redacted] for any questions regarding volume data findings.

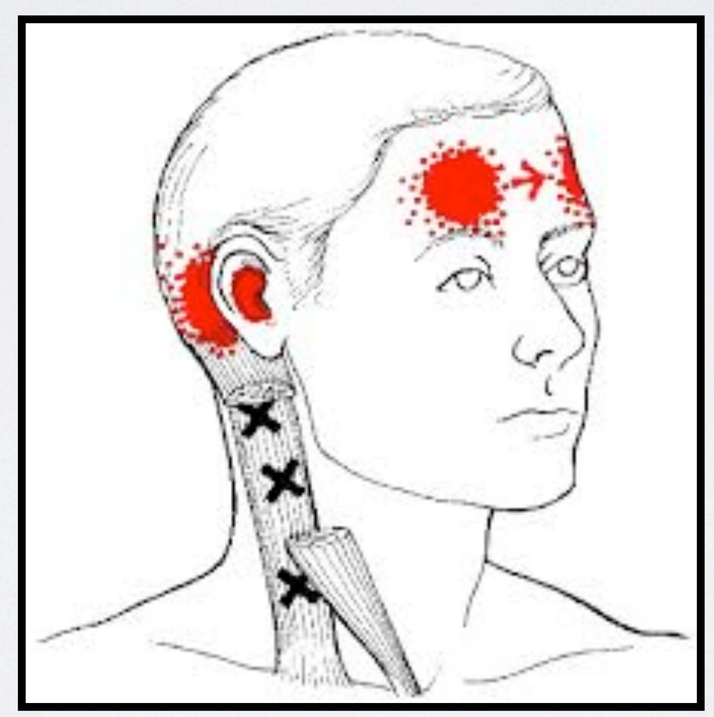
Sincerely,

Board Certified Oral and Maxillofacial Radiologist



WORKING DIAGNOSIS

- (Suspected) Bilateral Anterior Disc Displacement without Reduction 830.0
- Bilateral Capsulitis of the TMJ's- 726.90
- Referred Ear Pain - 388.72 (styloid process, SCM)



*Travell.Simmons.Myofacial Pain and Dysfuntion.

TREATMENT PLAN

V. Treatment Goals and Recommendations with Prognosis

A. Treatment Goals TMD

- ☒ Decompression of the TM joints
- ☒ Reducing inflammation
- ☒ Reducing pain in the TM joints
- ☒ Reducing adverse joint loading
- ☒ Reducing muscle pain
- ☒ Improving mandibular ranges of motion
- ☒ Strengthening the musculoskeletal system

Other: describe

C. Treatment Goals Sleep/Airway

Improved Breathing Through:

- ☐ FDA/OAT
- ☐ C PAP
- ☐ C PAP & FDA/OAT
- ☐ pending results of sleep study (PSG)
- ☐ appliance design to be determined post TM treatment
- ☒ Suspected compromised airway and/or sleep disorders will be investigated during TM treatment.

D. Recommended Treatment

- ☐ Coronoplasty (occlusal equilibration)
- ☐ Manipulation with anesthesia to reduce dislocation
- ☐ Manipulation without anesthesia to reduce dislocation
- ☒ None

Appliance Therapy

- ☒ Orthopedic appliances
- ☐ Splint appliances
- ☐ Sleep Appliances

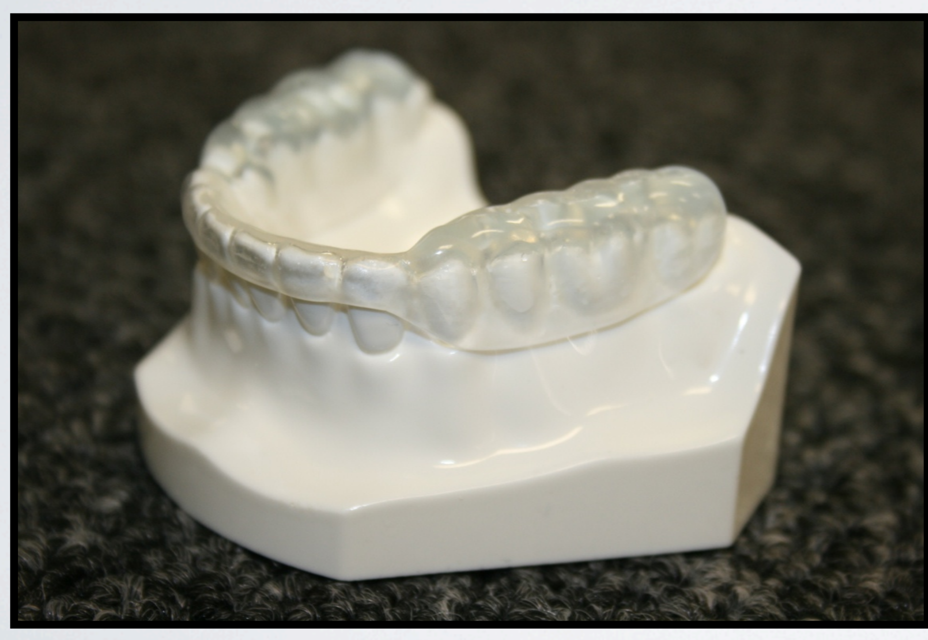
	Day	Night	24 hour	Type	Re-Eval for MMI at
☒ Maxillary		x			12 weeks
☒ Mandibular	x				12 weeks

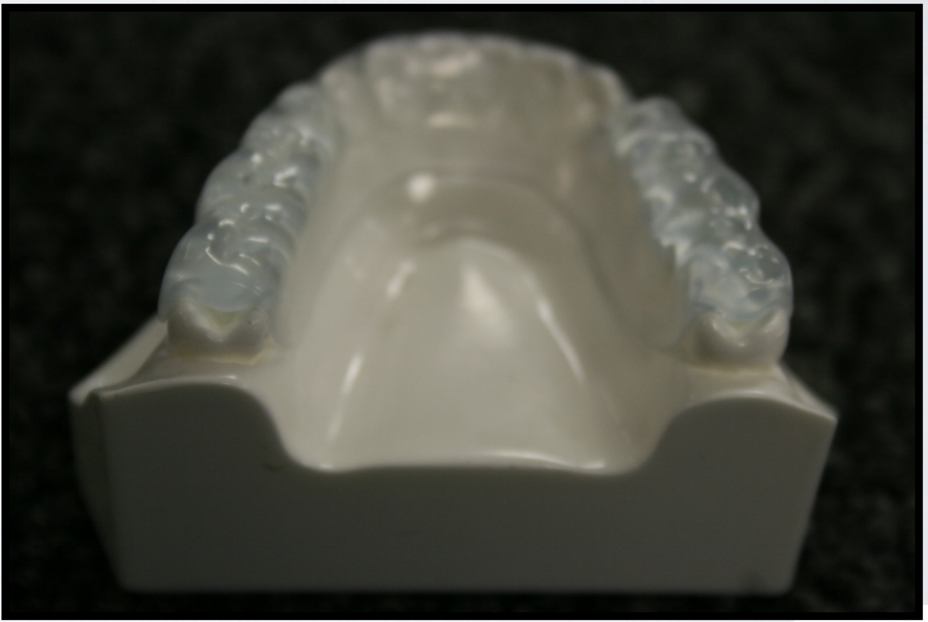
*Pertes, RA, Gross, S. Clinical Management of Temporomandibular Disorders and Orofacial Pain.
*Woodside, D. Condyle-fossa modifications and muscle interactions during herbst treatment.

APPLIANCE DESIGN

Daytime Orthotic (anterior repositioning appliance)

- Mandibular full coverage thermoforming
- Posterior centric contacts
- Lingual disclusion elements
- No protrusive or buccal interferences

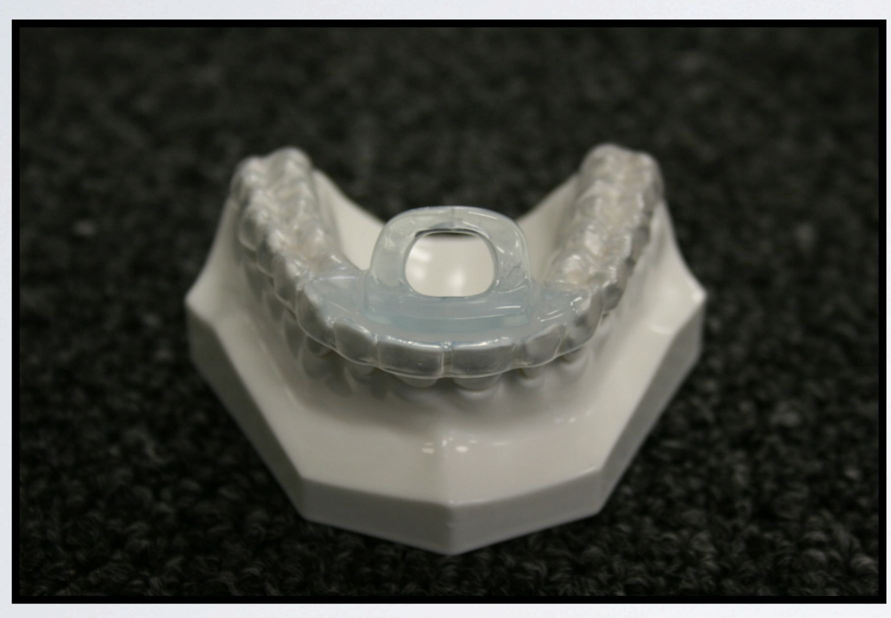




APPLIANCE DESIGN

Nighttime Orthotic (anterior repositioning appliance)

- Maxillary full coverage thermoforming
- Anterior contact only
- Farrar anterior plane with hole for tongue



TREATMENT PLAN

Physical Medicine Modalities

- [x] Aerobic conditioning
- [ ] Biofeedback
- [x] Cold laser therapy
- [ ] Cranial therapy
- [ ] Electrical stimulation
- [ ] Functional exercises to improve mandibular ranges of motion
- [ ] Ice
- [ ] Iontophoresis
- [ ] Medication regimen
- [ ] Moist heat
- [ ] Myofunctional therapy
- [ ] Nerve block injection
- [ ] Neuromuscular massage
- [x] Nutritional counseling
- [ ] Postural education
- [ ] Preventive counseling
- [ ] Radiofrequency neurolysis
- [x] Soft diet
- [ ] Soft tissue mobilization
- [ ] Transcutaneous electro-neuro stimulation (TENS)
- [ ] Trigger point injections
- [ ] Ultrasound
- [ ] Vapocoolant spray and stretch
- [ ] Other describe: Prolotherapy

Health Care Referral RECOMMENDATIONS FOR REFERRAL TO REACH MMI WITH INTERDISCIPLINARY CARE

- [x] I recommend referral to: Sleep Disorder Center — for evaluation and treatment of: possible sleep disordered breat
- [ ] In addition, I recommend referral to: ______ for evaluation and treatment of: ______
- [ ] I further recommend referral to: ______ for evaluation and treatment of: ______

E. Surgery

	right	left	bilateral
[ ] Arthrocentesis:	[ ]	[ ]	[ ]
[ ] Arthroplastic surgery:	[ ]	[ ]	[ ]
[ ] Arthroscopic surgery:	[ ]	[ ]	[ ]
[ ] Arthroscopic surgery with implant prosthesis:	[ ]	[ ]	[ ]

- [ ] Closed lock reduction
- [ ] Surgery of the TMJ
- [ ] Other describe: ______

F. Prognosis

[ ] Excellent [ ] Good [x] Fair [ ] Guarded [ ] Poor [ ] Unknown

All clinical tests, risks, and treatment alternatives were reviewed with patient.

Patient understood potential need for manual manipulation or arthrocentesis.

CLINICAL RECORDS

Records Appointment (4-10-13)

- Medium aqualizer worn for 10 minutes prior to bite records
- Daytime and nighttime physiologic phonetic bite records taken
- Two maxillary and mandibular impressions - border lock trays

*Singh,Olmos.Sleep Breathing 2007.Use of sibilant phoneme registration protocol to prevent upper airway collapse in patients with TMD

DELIVERY OF APPLIANCES

Delivery Appointment (5-1-13)

- Medium aqualizer worn for 10 minutes prior to delivery

- Delivered day and night orthotic

- Reviewed wear & care guidelines and sleep hygiene

- Discussed healthy diet recommendations and gave handout

- Gave patient Range of Motion Exercises and reviewed

DELIVERY OF APPLIANCES

RANGE OF MOTION EXERCISES

There are three exercises:

- Max opening
- Left lateral movement
- Right lateral movement

Max opening:

- Open as wide as you can then apply pressure on chin using your hand to help increase opening. You may feel a pull. Hold this for 30 seconds and then release. Do this a total of 4x, 4x daily. There is a 30 second rest between repetitions.

Left lateral movement:

- Slide your jaw as far as you can to the left then using your hand, apply pressure from the opposite side of the way you are moving and hold for 30 seconds. You may feel a pull. Do this a total of 4x, 4x daily. There is a 30 second rest between repetitions.

Right lateral movement:

- Slide your jaw as far as you can to the right then using your hand, apply pressure from the opposite side of the way you are moving and hold for 30 seconds. You may feel a pull. Do this a total of 4x, 4x daily. There is a 30 second rest between repetitions.

- **Do each exercise 4 times, hold for 30 seconds, at least 4x daily.**

We are trying to break adhesions so it will be normal for your jaw to make sounds as well as experience slight soreness.

PROGRESS EVALUATIONS

TMD PROGRESS REPORT

1. What has been the level of your head, ear or facial pain since your last visit? **(0 – none, 1- lowest, 10 – highest)**
   Circle your choice of: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
2. What has improved since your last visit? ____________________
3. What other areas of your body continue to be painful? ____________________
4. What has been your chief complaint(s) since your **last** visit? ____________________
5. What medications are you taking for relief of pain? ____________________
6. Is it easy to fall asleep? _____ Do you wake during the night? _____ Do you feel rested upon AM Waking? _____
7. On average, in a 24 hour day, I have worn my appliances _____ hours/day _____ hours/night
8. When do you remove your appliance(s)? ____________________
9. Do you feel our treatment is helping you? **(Please Circle)** YES NO
10. If you are presently going to a chiropractor, massage therapist, or physical therapist, do You feel that the therapy is helping you? **(Please Circle)** YES NO

Patient Name ______ **Patient Signature** ______ **Date** ______

*Notes for Review #1-10 **OFFICE USE ONLY**

ROM W/O ORTHOTIC

Interincisal Opening _____ mm
Lateral Excursion Rt _____ mm
Lateral Excursion Lt _____ mm
Protrusive _____ mm

Blood Pressure _____
Heart Rate _____

ORTHOTIC CHECK

Day Appliance Insert/Reline/Adjust
Night Appliance Insert/Reline/Adjust

Parachute Test:		**Wall Test:**	
W/ Day Orthotic	**W/ Night Orthotic**	**W/ Day Orthotic**	**W/ Night Orthotic**
+ – w/o Appliance	+ – w/o Appliance	+ – w/o Appliance	+ – w/o Appliance
+ – w/ Appliance	+ – w/ Appliance	+ – w/ Appliance	+ – w/ Appliance

***Today's Primary:** ______

Chief Complaints:	**Resolved or Recommendations:**
1. ______	1. ______ % ______
2. ______	2. ______ % ______
3. ______	3. ______ % ______
4. ______	4. ______ % ______
5. ______	5. ______ % ______

COMPLIANCE: ORTHOTIC WEAR ______ MEDS ______ REFERRAL ______

Additional Notes: ____________________

Review of Meds: ______ **Reviewed by:** ______ **Seen by:** ______

TREATMENTS:

Trigger Point Sites: ______ = Delivered Meds: .5cc Sarapin .5cc Depomedrol 1.5cc Procaine 1%

Prolo Therapy sites: ______ = Delivered Meds: .5cc Dextrose .5cc BacH2O 1.5cc Lidocaine 2%

LASER: C-Spine/Traps TM/Masseter LI4 Other PMT ______

Post Treatments - Percent reduction of symptoms reported by patient: ______

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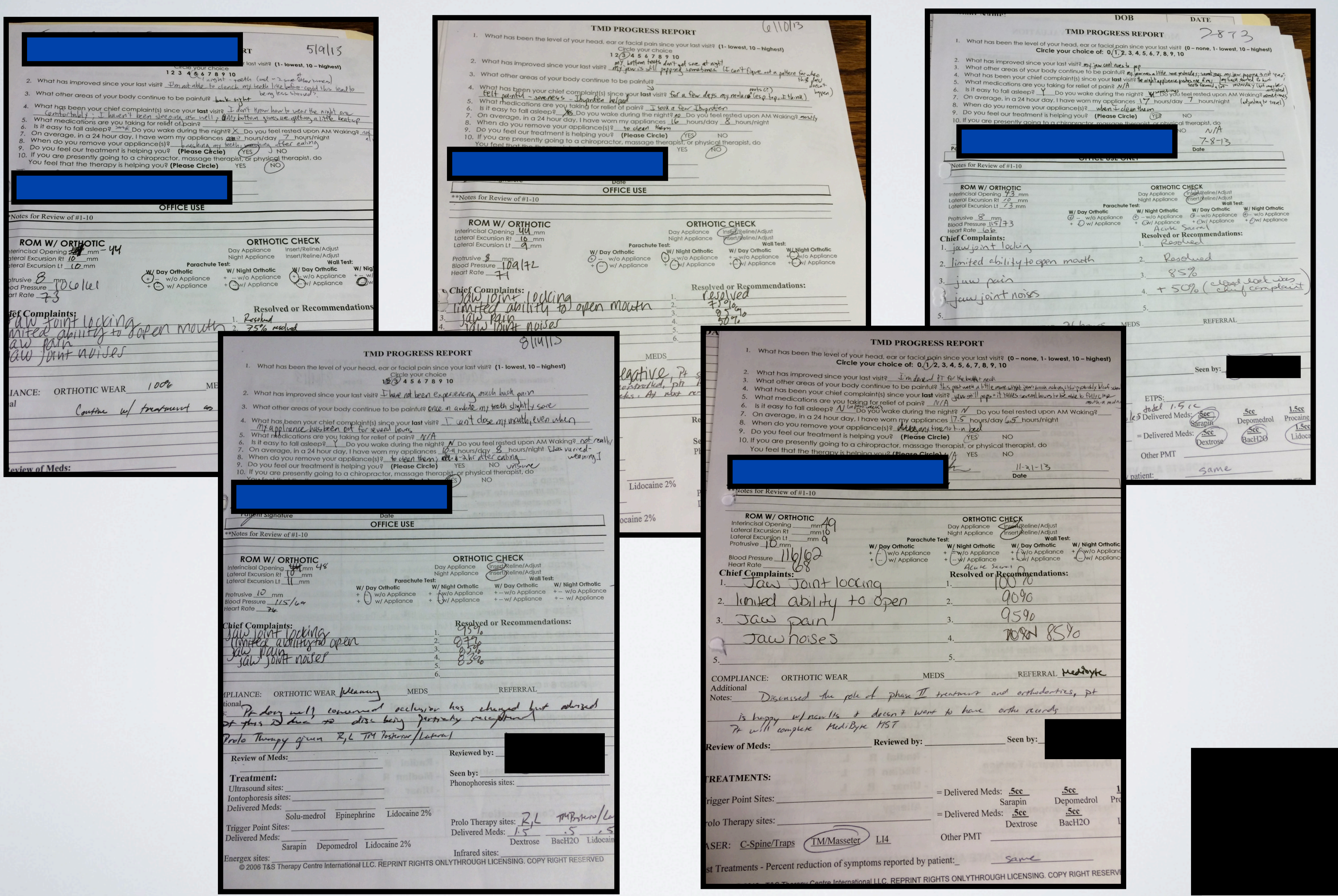
PROGRESS EVALUATIONS



8/14/13

TMD PROGRESS REPORT

1. What has been the level of your head, ear or facial pain since your last visit? **(1- lowest, 10 – highest)**
   Circle your choice
   1 2 3 4 5 6 7 8 9 10
2. What has improved since your last visit? I have not been experiencing much back pain
3. What other areas of your body continue to be painful? once in awhile my teeth slightly sore
4. What has been your chief complaint(s) since your **last** visit? I can't close my mouth, even when my appliance has been out for several hours
5. What medications are you taking for relief of pain? N/A
6. Is it easy to fall asleep? Y Do you wake during the night? N Do you feel rested upon AM Waking? not really
7. On average, in a 24 hour day, I have worn my appliances 10-11 hours/day 8 hours/night [has varied - weaning]
8. When do you remove your appliance(s)? to clean them; 1-2hr after eating
9. Do you feel our treatment is helping you? **(Please Circle)** YES NO unsure
10. If you are presently going to a chiropractor, massage therapist, or physical therapist, do You feel that the therapy is helping you? (Please Circle) YES NO

Patient Signature Date

OFFICE USE

**Notes for Review of #1-10

ROM W/ ORTHOTIC
Interincisal Opening 48 mm
Lateral Excursion Rt 10 mm
Lateral Excursion Lt 11 mm
Protrusive 10 mm
Blood Pressure 115/64
Heart Rate 76

ORTHOTIC CHECK
Day Appliance Insert/Reline/Adjust
Night Appliance Insert/Reline/Adjust
Parachute Test: W/ Day Orthotic + – w/o Appliance + – w/ Appliance; W/ Night Orthotic + – w/o Appliance + – w/ Appliance
Wall Test: W/ Day Orthotic + – w/o Appliance + – w/ Appliance; W/ Night Orthotic + – w/o Appliance + – w/ Appliance

Chief Complaints:
1. Jaw joint locking
2. limited ability to open
3. Jaw pain
4. Jaw joint noises

Resolved or Recommendations:
1. 95%
2. 87%
3. 85%
4. 83%
5.
6.

COMPLIANCE: ORTHOTIC WEAR weaning MEDS REFERRAL
Additional Notes: Pt doing well, concerned occlusion has changed but advised pt this is due to disc being partially recaptured
Prolo Therapy given R,L TM Posterior/Lateral

Review of Meds: **Reviewed by:** **Seen by:**

Treatment:
Ultrasound sites:
Iontophoresis sites:
Delivered Meds: Solu-medrol Epinephrine Lidocaine 2%
Trigger Point Sites:
Delivered Meds: Sarapin Depomedrol Lidocaine 2%
Energex sites:
Phonophoresis sites:
Prolo Therapy sites: R,L TM Posterior/Lateral
Delivered Meds: 1.5 Dextrose .5 BacH2O .5 Lidocaine
Infrared sites:

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TMD PROGRESS REPORT

1. What has been the level of your head, ear or facial pain since your last visit? **(0 – none, 1- lowest, 10 – highest)**
   Circle your choice of: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
2. What has improved since your last visit? I'm done w/ PT for the back + neck
3. What other areas of your body continue to be painful? this past week a little more slight jaw + back aching (tho' probably b/c of school)
4. What has been your chief complaint(s) since your **last** visit? jaw still pops + it takes several hours to be able to fully close mouth in morning
5. What medications are you taking for relief of pain? N/A
6. Is it easy to fall asleep? N (in past week) Do you wake during the night? N Do you feel rested upon AM Waking?
7. On average, in a 24 hour day, I have worn my appliances 17.5 hours/day 6.5 hours/night
8. When do you remove your appliance(s)? during any time not in bed
9. Do you feel our treatment is helping you? **(Please Circle)** YES NO
10. If you are presently going to a chiropractor, massage therapist, or physical therapist, do You feel that the therapy is helping you? (Please Circle) N/A YES NO

Date 11-21-13

**Notes for Review of #1-10

ROM W/ ORTHOTIC
Interincisal Opening 49 mm
Lateral Excursion Rt 10 mm
Lateral Excursion Lt 9 mm
Protrusive 10 mm
Blood Pressure 116/62
Heart Rate 68

ORTHOTIC CHECK
Day Appliance Insert/Reline/Adjust
Night Appliance Insert/Reline/Adjust
Parachute Test: W/ Day Orthotic + – w/o Appliance + – w/ Appliance; W/ Night Orthotic + – w/o Appliance + – w/ Appliance
Wall Test: W/ Day Orthotic + – w/o Appliance + – w/ Appliance; W/ Night Orthotic + – w/o Appliance + – w/ Appliance
Acute Sacral

Chief Complaints:
1. Jaw Joint locking
2. limited ability to open
3. Jaw pain
4. Jaw noises
5.

Resolved or Recommendations:
1. 100%
2. 90%
3. 95%
4. 85%
5.

COMPLIANCE: ORTHOTIC WEAR MEDS REFERRAL MediByte
Additional Notes: Discussed the role of phase II treatment and orthodontics, pt is happy w/ results & doesn't want to have ortho records
Pt will complete MediByte HST

Review of Meds: **Reviewed by:** **Seen by:**

TREATMENTS:
Trigger Point Sites: = Delivered Meds: .5cc Sarapin .5cc Depomedrol
Prolo Therapy sites: = Delivered Meds: .5cc Dextrose .5cc BacH2O
LASER: C-Spine/Traps TM/Masseter LI4
Other PMT
Post Treatments - Percent reduction of symptoms reported by patient: same

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PROGRESS EVALUATION

TMD PROGRESS REPORT 5/9/13

1. What has been the level of your head, ear or facial pain since your last visit? **(1 - lowest, 10 – highest)**
   Circle your choice
   1 2 3 4 5 6 7 8 9 10
2. What has improved since your last visit? I'm not able to clench my teeth like before - could this lead to being less stressed?
3. What other areas of your body continue to be painful? back tight
4. What has been your chief complaint(s) since your last visit? I don't know how to wear the night one comfortably; I haven't been sleeping as well; my bottom gums are getting a little beat up
5. What medications are you taking for relief of pain?
6. Is it easy to fall asleep? sort of Do you wake during the night? X Do you feel rested upon AM Waking? not
7. On average, in a 24 hour day, I have worn my appliances ___ hours/day 7 hours/night
8. When do you remove your appliance(s)? brushing my teeth, after eating
9. Do you feel our treatment is helping you? **(Please Circle)** YES NO
10. If you are presently going to a chiropractor, massage therapist, or physical therapist, do you feel that the therapy is helping you? **(Please Circle)** YES NO

Patient Signature

Date 5-9-13

Date 5-9-13

OFFICE USE

*Notes for Review of #1-10

ROM W/ ORTHOTIC
Interincisal Opening ___ mm - 44
Lateral Excursion Rt 10 mm
Lateral Excursion Lt 10 mm
Protrusive 8 mm
Blood Pressure 106/66
Heart Rate 73

ORTHOTIC CHECK
Day Appliance Insert/Reline/Adjust
Night Appliance Insert/Reline/Adjust

Parachute Test:
W/ Day Orthotic: + – w/o Appliance; + – w/ Appliance
W/ Night Orthotic: + – w/o Appliance; + – w/ Appliance

Wall Test:
W/ Day Orthotic: + – w/o Appliance; + – w/ Appliance
W/ Ni...

Chief Complaints:
Jaw joint locking
Limited ability to open mouth
Jaw pain
Jaw joint noises

Resolved or Recommendation
1. Resolved
2. 75% resolved
3. 50% resolved
4. 50% Resolved
5.
6.

COMPLIANCE: ORTHOTIC WEAR 100% MEDS Ø REFERRAL Ø

Continue w/ treatment as prescribed

Reviewed by:

PROGRESS EVALUATION

TMD Progress Report (5-9-13)

Chief Complaints

1. Jaw Joint Locking - 100% Resolved
2. Limited Ability to Open - 75% Resolved
3. Jaw Pain - 95% Resolved
4. Jaw Joint Noises - 50% Resolved (Joint Noises Present Again)

ROM:
Interincisal 44 mm
Rt Lateral 10 mm
Lt Lateral 10 mm
Protrusive 8 mm

ROM: (Pretreatment)
Interincisal 37 mm
Rt Lateral 9 mm
Lt Lateral 3 mm
Protrusive 7 mm

*** Patient reported jaw joint noises within 24 hours**

Recommendations
- Continue with recommended treatment

PROGRESS EVALUATION

6/10/13

TMD PROGRESS REPORT

1. What has been the level of your head, ear or facial pain since your last visit? **(1- lowest, 10 – highest)**
   Circle your choice
   1 2 (3) 4 5 6 7 8 9 10
2. What has improved since your last visit? my bottom teeth don't get sore at night
3. What other areas of your body continue to be painful? my jaw is still popping sometimes (I can't figure out a pattern for when this does/doesn't happen)
4. What has been your chief complaint(s) since your last visit? for a few days my molars (roots?) (esp top, I think) felt painful – soreness – Ibuprofen helped
5. What medications are you taking for relief of pain? I took a few Ibuprofen
6. Is it easy to fall asleep? Yes Do you wake during the night? no Do you feel rested upon AM Waking? mostly
7. On average, in a 24 hour day, I have worn my appliances 16 hours/day 8 hours/night
8. When do you remove your appliance(s)? to clean them
9. Do you feel our treatment is helping you? **(Please Circle)** (YES) NO
10. If you are presently going to a chiropractor, massage therapist, or physical therapist, do you feel that [redacted] you? **(Please Circle)** YES (NO)

[redacted] 6-10-13
Patient Signature — Date 6-10-13
Date

OFFICE USE

**Notes for Review of #1-10

ROM W/ ORTHOTIC

Interincisal Opening 44 mm
Lateral Excursion Rt 10 mm
Lateral Excursion Lt 9 mm
Protrusive 8 mm
Blood Pressure 109/72
Heart Rate 71

ORTHOTIC CHECK

Day Appliance (Insert)/Reline/Adjust
Night Appliance (Insert)/Reline/Adjust

Parachute Test:

W/ Day Orthotic (+) – w/o Appliance; + (–) w/ Appliance
W/ Night Orthotic (+) – w/o Appliance; + (–) w/ Appliance

Wall Test:

W/ Day Orthotic + – w/o Appliance; + (–) w/ Appliance
W/ Night Orthotic + (–) w/o Appliance; + (–) w/ Appliance

Chief Complaints:	**Resolved or Recommendations:**
1. jaw joint locking	1. resolved
2. limited ability to open mouth	2. 75%
3. jaw pain	3. 85%
4. jaw joint noises	4. 50%
5.	5.
6.	6.

COMPLIANCE: ORTHOTIC WEAR ______ MEDS ______ REFERRAL Osteopath Sacral pa[…]

Additional Notes: Spinal Screen test = negative, Pt still has significant joint noises, however pain is well controlled, pt's ROM has improved. Pt is leaving for Spain for two weeks. At next reeval may refer to Dr. Cantieri for prolo therapy

Reviewed by: [redacted]

Review of Meds: ______

Seen by: ______

Treatment:

Phonophoresis sites: ______

Ultrasound sites: ______

Iontophoresis sites: ______

Delivered Meds: ______ Solu-medrol ______ Epinephrine ______ Lidocaine 2%

Prolo Therapy sites: ______

Delivered Meds: ______ Dextrose ______ BacH2O ______ Lidocaine

Trigger Point Sites: ______

Delivered Meds: ______ Sarapin ______ Depomedrol ______ Lidocaine 2%

Infrared sites: ______

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PROGRESS EVALUATION

TMD Progress Report (6-10-13)

Chief Complaints

1. Jaw Joint Locking - 100% Resolved
2. Limited Ability to Open - 75% Resolved
3. Jaw Pain - 85% Resolved
4. Jaw Joint Noises - 50% Resolved (Joint Noises Present Again)

ROM:
Interincisal 44 mm
Rt Lateral 10 mm
Lt Lateral 9 mm
Protrusive 8 mm

ROM: (Pretreatment)
Interincisal 37 mm
Rt Lateral 9 mm
Lt Lateral 3 mm
Protrusive 7 mm

Recommendations
- Continue with recommended treatment
- Referred to osteopath for sacral pain
- Begin prolo therapy next appointment

PROGRESS EVALUATION

TMD PROGRESS REPORT 2873

1. What has been the level of your head, ear or facial pain since your last visit? **(0 – none, 1- lowest, 10 – highest)**
   Circle your choice of: 0, (1, 2), 3, 4, 5, 6, 7, 8, 9, 10
2. What has improved since your last visit? my jaw continues to pop
3. What other areas of your body continue to be painful? my jaw was a little sore yesterday; sometimes my jaw popping is not "even"
4. What has been your chief complaint(s) since your **last** visit? the night appliance pushes one (my) teeth forward a lot / my back started to hurt yesterday (but may be unrelated)
5. What medications are you taking for relief of pain? N/A
6. Is it easy to fall asleep? Y Do you wake during the night? N (sometimes) Do you feel rested upon AM Waking? sometimes
7. On average, in a 24 hour day, I have worn my appliances 17 hours/day 7 hours/night (adjusting to travel)
8. When do you remove your appliance(s)? when I clean them
9. Do you feel our treatment is helping you? (Please Circle) (YES) NO
10. If you are presently going to a chiropractor, massage therapist, or physical therapist, do You feel that the therapy is helping you? NO N/A

7-8-13
Date

OFFICE USE ONLY

Notes for Review of #1-10

ROM W/ ORTHOTIC

Interincisal Opening 43 mm
Lateral Excursion Rt 10 mm
Lateral Excursion Lt 13 mm

Protrusive 8 mm
Blood Pressure 115/73
Heart Rate 66

ORTHOTIC CHECK

Day Appliance (Insert)/Reline/Adjust
Night Appliance (Insert)/Reline/Adjust

Parachute Test:
W/ Day Orthotic: (+) -- w/o Appliance; + (–) w/ Appliance
W/ Night Orthotic: (+) -- w/o Appliance; + (–) w/ Appliance

Wall Test:
W/ Day Orthotic: (+) -- w/o Appliance; + (–) w/ Appliance
W/ Night Orthotic: (+) -- w/o Appliance; + (–) w/ Appliance

Acute Sacral

Chief Complaints:	**Resolved or Recommendations:**
1. jaw joint locking	1. Resolved
2. limited ability to open mouth	2. Resolved
3. jaw pain	3. 85%
4. jaw joint noises	4. + 50% (closed lock was chief complaint)
5.	5.

COMPLIANCE: ORTHOTIC WEAR 24 hours MEDS REFERRAL

Additional Notes:

Seen by:

Review of Meds: Reviewed by:

TREATMENTS:

Iontophoresis /Phonophoresis sites:

ETPS:

~~Trigger Point Sites~~: (B) Post TMJ + Lateral poles

total 1.5cc Delivered Meds: (.5cc Sarapin) .5cc Depomedrol 1.5cc Procaine 1

(Prolo Therapy) sites:

= Delivered Meds: (.5cc Dextrose) (.5cc BacH2O) (1.5cc Lidocain)

Other PMT

LASER: C-Spine/Traps (TM/Masseter) LI4

Post Treatments - Percent reduction of symptoms reported by patient: same

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PROGRESS EVALUATION

TMD Progress Report (7-8-13)

Chief Complaints

1. Jaw Joint Locking - 100% Resolved
2. Limited Ability to Open - 100% Resolved
3. Jaw Pain - 85% Resolved
4. Jaw Joint Noises - 50% Resolved (Joint Noises Present Again)

ROM:
Interincisal 43 mm
Rt Lateral 10 mm
Lt Lateral 13 mm
Protrusive 8 mm

ROM: (Pretreatment)
Interincisal 37 mm
Rt Lateral 9 mm
Lt Lateral 3 mm
Protrusive 7 mm

Treatment and Recommendations
-Prolo Therapy Posterior Joint Space and Lateral Capsules bilaterally
- MLS Laser Therapy Masseters
- Continue with treatment and osteopath

MAXIMUM MEDICAL IMPROVEMENT

TMD PHASE I
MMI RECORDS REVIEW

Patient Name: ____________

Treatment initiated on: 5-1-13

Today's Date: 7-30-13 Referring Doctor: ____________

Tomogram X Photos X JVA/JT ____ ROM X

Muscle Palpation X Motor Reflex Evaluation Testing X

I understand that the decompression therapy which has been successful in reducing symptoms has now reached MMI (maximum medical improvement) through Phase I Positioning Orthotic Therapy, and a weaning phase (gradually subsiding wear of orthotic appliances) has been recommended. I understand that the weaning from appliance may result in return of original symptoms and/or new symptoms. If there is a return of symptoms, I have the options to begin additional treatment (types and fee to be determined after evaluation) or to be seen for symptomatic treatments (charged as provided).

I have been given directions for gradually subsiding appliance therapy (weaning) which includes follow-up evaluation for 2 visits. It has been explained to me and I fully understand that the appliance(s) I am currently wearing are temporary in fabrication and will wear down as time passes with a potential return of symptoms, and that continued wear requires at least monthly monitoring appointments in this office, as well as possible repairs and relines, all of which require additional fees. It has been explained to me and I further understand that with the continued wear of appliances, unusual occurrences can and do happen. These possibilities could include minor tooth movement, loosened teeth or dental restorations, changes in tooth to tooth relationship (i.e. open bite –failure of back teeth to touch) sore mouth, periodontal problems, muscle spasms, ear pain, neck pain, etc. Any of the mentioned complications are rare, but theoretically may occur. Additional medical and dental risks that have not been mentioned may also occur.

Once I have completed the weaning process, it has been explained to me and I understand that bi-annual re-evaluations are recommended for the maintenance of my joint health and function. These visits are no included in the initial treatment plan and separate fees will be charged.

Signature of Patient

7-31-13
Date

MAXIMUM MEDICAL IMPROVEMENT

Pre-Treatment:

Patient Standing,
Front View

Post-Treatment:

Patient Standing,
Front View

Pre-Treatment:

Patient Standing,
Side View

Post-Treatment;

Patient Standing;
Side View

*Fonder, A.C. The Role of the Dental Physician.
*Fonder, A.C. Dental Distress, Respiratory, and Posture Problems.

MAXIMUM MEDICAL IMPROVEMENT

0 = No Tenderness, 1 = Mild Tenderness, 2 - Moderate Pain, 3 - Severe Pain

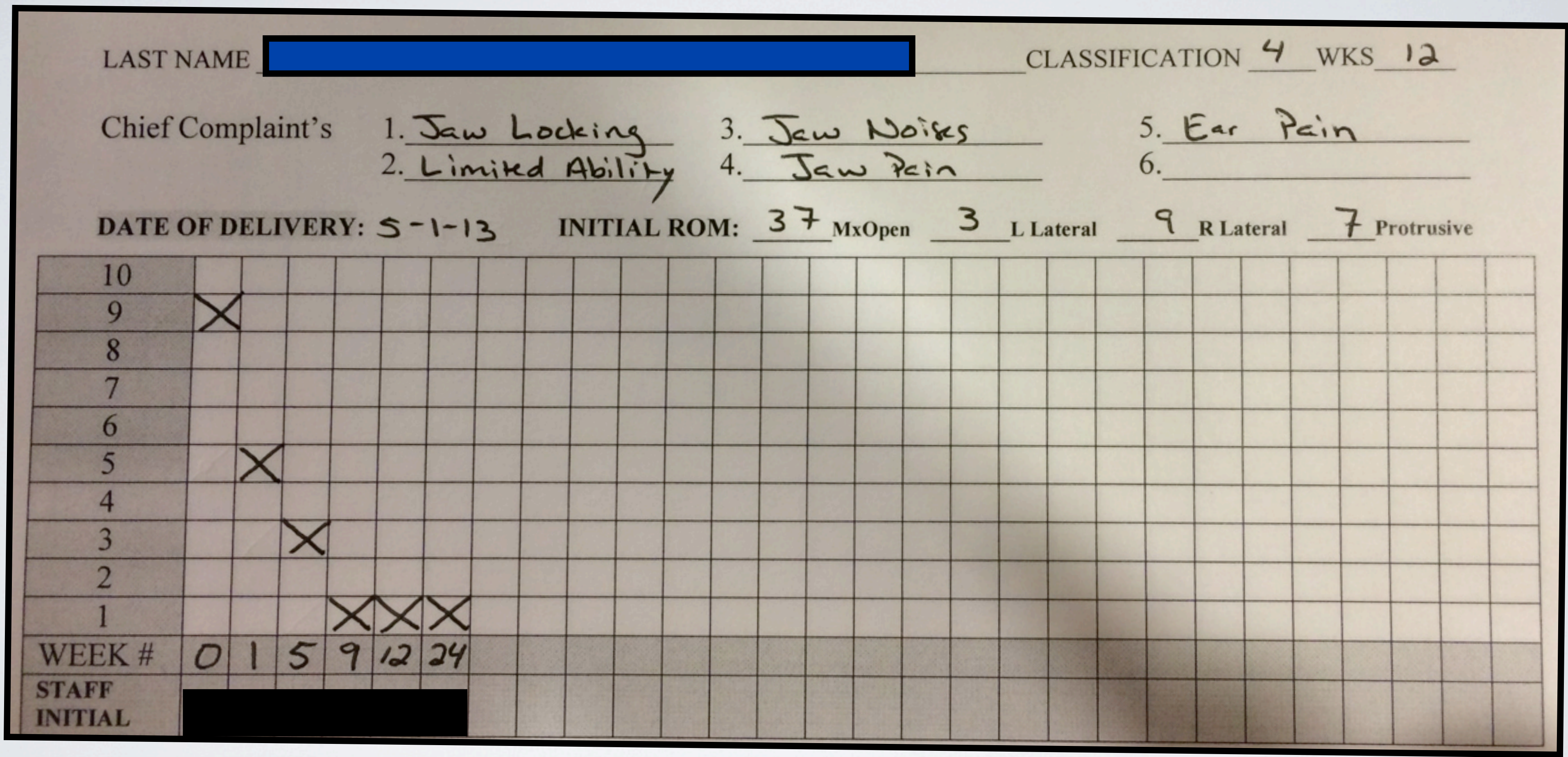
Muscles

	Left	Right
Anterior Temporalis	1	0
Middle Temporalis	1	1
Posterior Temporalis	0	0
Lateral Temporomandibular Capsule		
Posterior Joint space		
Deep Masseter		
Superficial Masseter		
Stylomandibular Ligament		
Sternocleidomastoid		
Styloid Process		
Trapezius insertion at occiput		
Greater Occipital		
Splenius Capitis		
Lesser Occipital		
Greater Auricular Nerve		
Trapezius Neck Area		
Trapezius Shoulder Area		
Cervical Vertebra [ ] Level		
Anterior Digastric		
Temporal Tendon insertion on ramus		
Medial Pterygoid		
Buccinator Origin		
Buccinator Insertion		
Vertex		

	Left	Right
Anterior Temporalis	1	0
Middle Temporalis	1	0
Posterior Temporalis	0	0
Lateral Temporomandibular Capsule	1	1
Posterior Joint space	2	0
Deep Masseter	0	0
Superficial Masseter	0	1
Stylomandibular Ligament	0	0
Sternocleidomastoid	1	0
Styloid Process	1	0
Trapezius insertion at occiput	0	1
Greater Occipital	0	0
Splenius Capitis	1	0
Lesser Occipital	0	0
Greater Auricular Nerve	0	0
Trapezius Neck Area	0	0
Trapezius Shoulder Area	1	0
Cervical Vertebra [ ] Level	0 [ ] Level	0
Anterior Digastric	0	1
Temporal Tendon insertion on ramus	2	0
Medial Pterygoid	2	0
Buccinator Origin	0	0
Buccinator Insertion	0	1
Vertex	0	0

Muscle Palpations at MMI showed marked improvement

MAXIMUM MEDICAL IMPROVEMENT



LAST NAME ____________ CLASSIFICATION 4 WKS 12

Chief Complaint's
1. Jaw Locking
2. Limited Ability
3. Jaw Noises
4. Jaw Pain
5. Ear Pain
6.

DATE OF DELIVERY: 5-1-13 **INITIAL ROM:** 37 **MxOpen** 3 **L Lateral** 9 **R Lateral** 7 **Protrusive**

10						
9	X					
8						
7						
6						
5		X				
4						
3			X			
2						
1				X	X	X
WEEK #	0	1	5	9	12	24
STAFF INITIAL						

MAXIMUM MEDICAL IMPROVEMENT

Chief Complaints

1. Jaw Joint Locking - 75% Resolved
2. Limited Ability to Open - 75% Resolved
3. Jaw Pain - 80% Resolved
4. Jaw Joint Noises - 75% Resolved

ROM:
Interincisal 51 mm
Rt Lateral 9 mm
Lt Lateral 7 mm
Protrusive 8 mm

ROM: (Pretreatment)
Interincisal 37 mm
Rt Lateral 9 mm
Lt Lateral 3 mm
Protrusive 7 mm

Recommendations
- Continue with osteopathic treatment
- Prolo Therapy (patient declined today despite improvement since last appointment)
- Weaning of daytime orthotic

WEANING SCHEDULE

Weaning Instructions

1. You may wait 30-45minutes after eating to remove the appliance in weeks 1-4. (eating can aggravate the TMJ)
2. Some feel the need to replace the orthotic during times of stress or exercise; this is okay during weeks 1-4. Please be sure to wear the night appliance anytime you may be lying down.
3. If there is a slight aggravation during any phase of weaning you may extend the previous phase for another week, and then proceed to the next phase. (example: mild jaw pain in week 2, you can continue with weaning in week 2 for another week to be sure the jaw pain or whatever symptom has reduced then proceed)

Schedule

Interval	Orthotic Out	Orthotic In
Week 1	1Hour am /pm After Breakfast, Lunch and Dinner	To Eat & Sleep
Week 2	2 Hours am/ pm After Breakfast, Lunch and Dinner	To Eat & Sleep
Week 3	3 Hours am/ pm After Breakfast, Lunch and Dinner	To Eat & Sleep
Week 4	4Hours am/pm After Breakfast, Lunch and Dinner	To Eat & Sleep
Week 5	All Day	Sleep

WEANING EVALUATION

TMD Progress Report (8-14-13)

Chief Complaints

1. Jaw Joint Locking - 95% Resolved
2. Limited Ability to Open - 87% Resolved
3. Jaw Pain - 85% Resolved
4. Jaw Joint Noises - 83% Resolved

ROM:
Interincisal 48 mm
Rt Lateral 10 mm
Lt Lateral 11 mm
Protrusive 10 mm

ROM: (Pretreatment)
Interincisal 37 mm
Rt Lateral 9 mm
Lt Lateral 3 mm
Protrusive 7 mm

Recommendations
- Continue with nighttime orthotic
- Continue with osteopath
- MLS Laser Therapy Masseters
- Prolo Therapy Posterior Joint Spaces and Lateral Capsules bilaterally (completed today)

TREATMENT SUMMARY

Patient reported no difficulties weaning from daytime orthotic over the course of 5 weeks

Patient noted minor changes in occlusion (understood reasons), however was not significant enough for her to desire or warrant orthodontic records for Phase 2 treatment

Pain Reduced from 9/10 to 1/10 on VAS

Sacral pain is the only pain that continue to persist. Prolo therapy was recommended but because insurance didn't cover it patient declined.

Chief Complaints

1. Jaw Joint Locking - 95% Resolved
2. Limited Ability to Open - 87% Resolved (muscular problem now)
3. Jaw Pain - 85% Resolved
4. Jaw Joint Noises - 83% Resolved
5. Ear Pain - 100% Resolved

Recommendations
- Continue use of nighttime orthotic to prevent locking in supine position
- MediByte HST to screen for Sleep Disordered Breathing
- Reevaluate every 6 months to maintain orthopedic stability

LETTER TO PHYSICIAN

Treatment Complete

Dear Dr.

This letter is offered to document the progress of treatment for mutual patient, . This patient was first examined on 03/27/2013, with chief complaint of jaw joint locking. The patient also reported: limited ability to open mouth, ear pain and jaw joint noises.

Mandibular Ranges of Motion measurements were: Maximum opening without pain (37 mm); Maximum opening with pain (40 mm); Maximum left lateral excursion (3 mm); Maximum right lateral excursion (9 mm); Maximum protrusion (7 mm); Deflection to the left (1 mm); Deviation to the right (2 mm). Cervical Ranges of Motion show: Painful Seated left rotation (70°); Not painful Seated right rotation (85°); Not painful Flexion (55°); Not painful Extension (55°).

My diagnosis based on clinical examination was: Anterior disc displacement without reduction, sleep disturbance (unspecified), Ligament laxity of the temporomandibular joint, TM joint stiffness and Pain in jaw. Treatment consisted of: Orthopedic Appliance Therapy with (Night) ON3 and (Day) OD3 appliances. Physical medicine modalities included: Aerobic conditioning, Nutritional counseling and Soft diet.

Phase I TM joint stabilization/rehabilitation has been completed and Janice has reached maximum medical improvement orthopedically. Post phase I treatment ranges of motion measured on 9-26-13 are: 49 mm maximum opening, left lateral movement 8 mm, right lateral movement 9 mm, protrusion 10 mm. Normal ranges of motion based on cranial skeletal types are: 42-52 mm maximum opening, 8-12 mm protrusive and 10-14mm of lateral movement both right and left.

The patient's chief complaint of jaw joint locking has been resolved 100%. The patient has successfully weaned from the day-time orthotic but continues to wear orthotics during the night for protection against para functional (clenching/grinding) activity and/or airway obstruction. The patient has been placed on a recall for re-evaluation. The long term prognosis for this patient is Excellent. Joints that have been orthopedically compromised/injured have a greater potential for re-injury.

Please update your records and feel free to contact our office for further information on this patient. Once again, thank you for your confidence in referrals.

Chief Complaints	**% Resolved or Recommendations**
1. Jaw Joint Locking	100% Resolved
2. Limited ability to open	93% Resolved
3. Jaw Pain	80% Resolved
4. Jaw Noises	85% Resolved

POST TREATMENT EVAL

TMD Progress Report (11-21-13)

Chief Complaints

1. Jaw Joint Locking - 100% Resolved
2. Limited Ability to Open - 90% Resolved
3. Jaw Pain - 95% Resolved
4. Jaw Joint Noises - 85% Resolved
5. Ear Pain - 100% Resolved

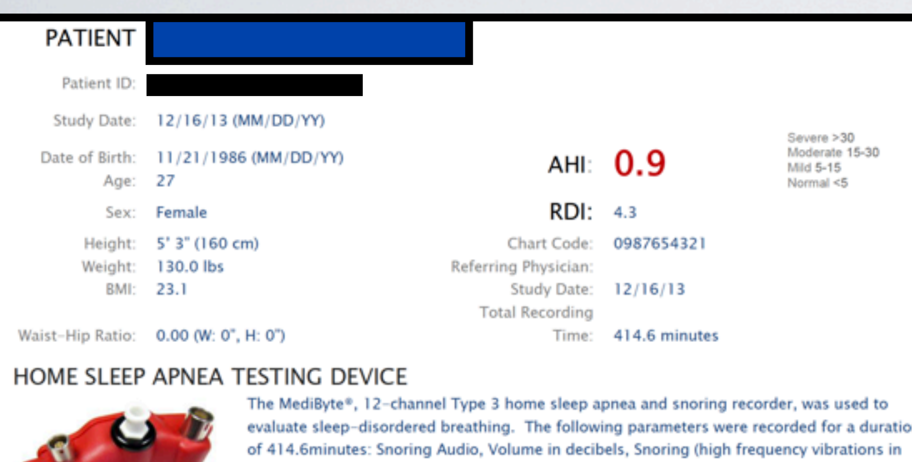
ROM:
Interincisal 49 mm
Rt Lateral 10 mm
Lt Lateral 10 mm
Protrusive 10 mm

ROM: (Pretreatment)
Interincisal 37 mm
Rt Lateral 9 mm
Lt Lateral 3 mm
Protrusive 7 mm

Recommendations
- Continue with nighttime orthotic
- MLS Laser Therapy
- Patient declined further Prolo Therapy
- Patient agreed to MediByte (given today)

CLINICAL PROCEDURES

MediByte Home Sleep Test (12-16-13)



PATIENT

Patient ID:

Study Date: 12/16/13 (MM/DD/YY)

Date of Birth: 11/21/1986 (MM/DD/YY)
Age: 27

Sex: Female

Height: 5' 3" (160 cm)
Weight: 130.0 lbs
BMI: 23.1

Waist-Hip Ratio: 0.00 (W: 0", H: 0")

AHI: 0.9

Severe >30
Moderate 15-30
Mild 5-15
Normal <5

RDI: 4.3

Chart Code: 0987654321
Referring Physician:
Study Date: 12/16/13
Total Recording Time: 414.6 minutes

HOME SLEEP APNEA TESTING DEVICE

The MediByte®, 12-channel Type 3 home sleep apnea and snoring recorder, was used to evaluate sleep-disordered breathing. The following parameters were recorded for a duration of 414.6minutes: Snoring Audio, Volume in decibels, Snoring (high frequency vibrations in airflow), oronasal pressure Airflow, thermal Airflow, RIP Chest/Abdominal/Sum Effort, SpO2, Pulse Rate, Body Position, and User Events.

Note: Respiratory events were scored using the following rules: Apneic events required a 90% or more reduction in airflow, Hypopneic events required a 30% reduction in airflow along with an accompanying 4% oxygen desaturation.

COMMENTS

Study events validated by P.Okolisan, RPSGT., RST. Signals collected optimally. AHI/RDI both within the normal range. There were numerous snoring vibrations and flow limitations detected off the oral/nasal pressure cannula -suggestive of UARS. No snoring sounds were detected off the audio sensor. The ODI/SpO2 desaturation index was in the normal range, mean SpO2 was above 96% and pulse rate was within normal range. The entire study was spent lateral -left side.

OXIMETRY

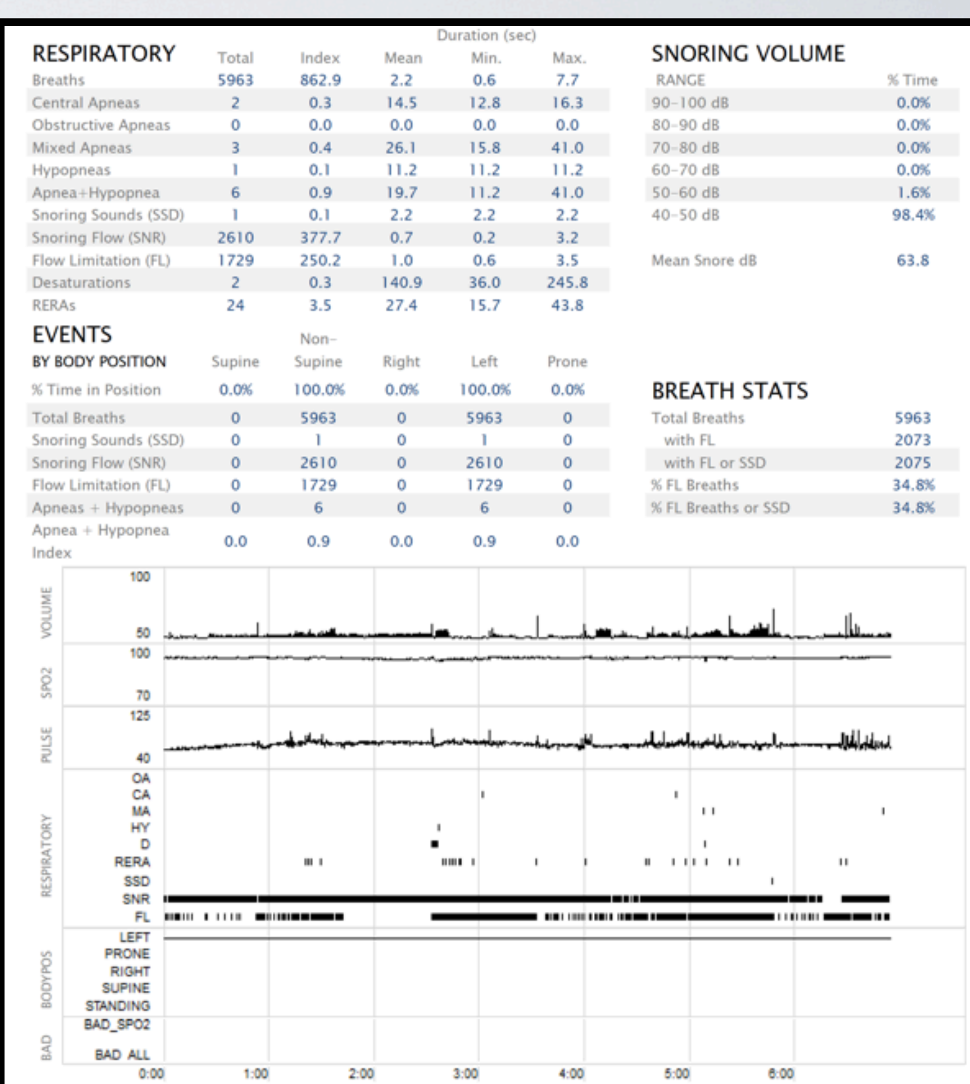
SpO₂ Range	%	Minutes
98-100 %	14.6%	60.5
96-98 %	82.2%	340.6
94-96%	3.3%	13.6
92-94 %	0.0%	0.0
90-92 %	0.0%	0.0
90-100 %	100.0%	414.6
80-89 %	0.0%	0.0
70-79 %	0.0%	0.0
60-69 %	0.0%	0.0
50-59 %	0.0%	0.0
< 50%	0.0%	0.0
Total <88 %	0.0%	0.0

	Total	Index
Desaturations ≥4%	2	0.3

	Mean	Min.	Max.
SpO₂ (%)	96.9	94.0	99.0
Pulse (BPM)	66.9	54.0	98.0

PULSE

Pulse Rate Range	%	Minutes
125-150	0.0%	0.0
100-125	0.0%	0.0
75-100	3.5%	14.6
50-75	96.5%	400.0
25-50	0.0%	0.0



RESPIRATORY

	Total	Index	Duration (sec) Mean	Min.	Max.
Breaths	5963	862.9	2.2	0.6	7.7
Central Apneas	2	0.3	14.5	12.8	16.3
Obstructive Apneas	0	0.0	0.0	0.0	0.0
Mixed Apneas	3	0.4	26.1	15.8	41.0
Hypopneas	1	0.1	11.2	11.2	11.2
Apnea+Hypopnea	6	0.9	19.7	11.2	41.0
Snoring Sounds (SSD)	1	0.1	2.2	2.2	2.2
Snoring Flow (SNR)	2610	377.7	0.7	0.2	3.2
Flow Limitation (FL)	1729	250.2	1.0	0.6	3.5
Desaturations	2	0.3	140.9	36.0	245.8
RERAs	24	3.5	27.4	15.7	43.8

SNORING VOLUME

RANGE	% Time
90-100 dB	0.0%
80-90 dB	0.0%
70-80 dB	0.0%
60-70 dB	0.0%
50-60 dB	1.6%
40-50 dB	98.4%
Mean Snore dB	63.8

EVENTS

BY BODY POSITION	Supine	Non-Supine	Right	Left	Prone
% Time in Position	0.0%	100.0%	0.0%	100.0%	0.0%
Total Breaths	0	5963	0	5963	0
Snoring Sounds (SSD)	0	1	0	1	0
Snoring Flow (SNR)	0	2610	0	2610	0
Flow Limitation (FL)	0	1729	0	1729	0
Apneas + Hypopneas	0	6	0	6	0
Apnea + Hypopnea Index	0.0	0.9	0.0	0.9	0.0

BREATH STATS

Total Breaths	5963
with FL	2073
with FL or SSD	2075
% FL Breaths	34.8%
% FL Breaths or SSD	34.8%