

Evidence Based Dentistry Rounds

Oral Medicine/Pharmacology

Group 9A-5

9/23/2020

Rounds Team

- **Group Leader:** Dr. Derderian
- **Specialty Leader:** Dr. Khaled
- **Project Team Leader:** Sahar Edalatpour
- **Project Team Participants:** Francesca Malensek, Jack Hayes, Austin Czarnecki

Patient

- 27 y.o. female
- Caucasian
- CC: “My left side has been hurting and swollen ever since my appointment last Tuesday”
 - On the following Monday

Medical History

- Allergies: Amoxicillin
- Medications: None
- CRPS – Complex Regional Pain Syndrome
 - Secondary to ankle injury

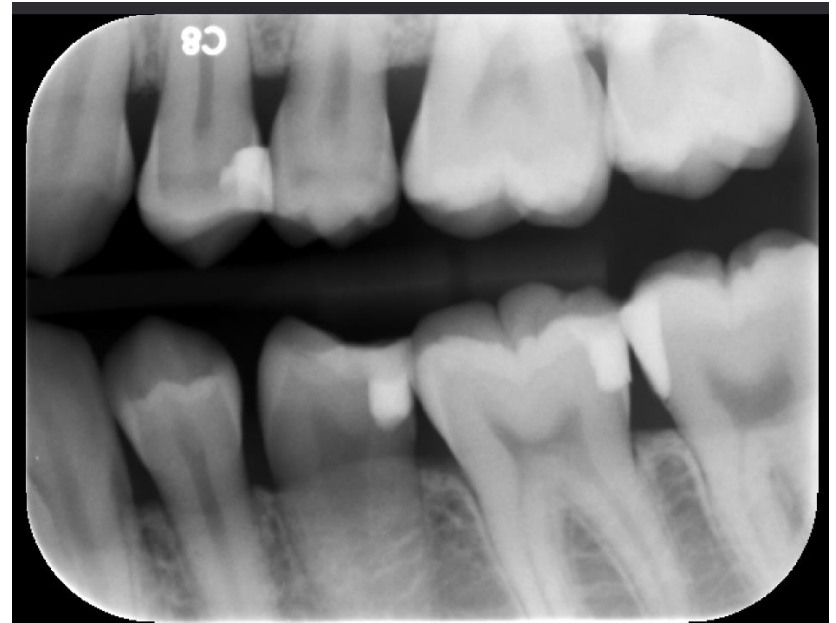
Dental History

- No significant dental history
- Pt reports brushing twice a day and flossing occasionally

Radiographs



Radiographs



Radiographs



Clinical Findings

- 7/28/20
 - Pt presents for tx plan presentation, prophy and resin restoration of #15-O
- 7/31/20 – Consult in OS
 - Pt reports pain and swelling immediately following 7/28 apt
 - S:
 - Pain felt with palpation of left maxillary buccal vestibule, pain and swelling are slowly improving
 - Pain scale - 6/10 on Tuesday, 5/10 today
 - Pt states mother has history of jaw problems
 - O:
 - Swelling of left buccal space
 - No signs of infection
 - Scalloping on lateral tongue bilaterally
 - Very tender at origins of masseter muscle (beneath zygoma and insertion at mandible)
 - Extraoral ecchymosis of lower left cheek
 - A: Masseteric muscle spasm suggestive of TMD
 - P: 1 or 2 Naproxen every 12 hours until pain and swelling subside, soft food diet, warm compresses

Clinical Findings Cont

- 8/03/20 – Follow-up in OS
 - CC: "My left side is feeling a little better but still hurts, is swollen and I can't open my mouth very wide"
 - Pt has been taking Naproxen, which has relieved some of the pain
 - Warm compresses done 2-3x/day, seems to help
 - Extraoral ecchymosis and swelling still present
 - Limited mouth opening of 10mm
 - Oral surgeon recommends consult with Dr. Khaled

Clinical Findings Cont

- 8/31/20 – Consult with Dr. Khaled
 - Pt is still taking Naproxen PRN, swelling has improved
 - Limited mouth opening of 10-15mm
 - Dx: Anterior disc displacement of the left side, mild capsulitis of the left side, moderate masticatory myalgia of the left masseter, mild masticatory myalgia of the bilateral SCM and trapezius muscles
 - Rx: Cyclobenzaprine 10mg 1x/day, Naproxen 500mg BID for 3 weeks
 - Occlusal splint recommended
 - Trigger point injections done on masseter bilaterally, left SCM and trapezius muscles

Clinical Findings Cont

- 9/14/20 – Follow-up with Dr. Khaled
 - Pt reports that symptoms got worse after TPI
 - Limited mouth opening of 5mm
 - Pain scale:
 - Right masseter - 5/10
 - Left masseter - 7/10
 - Left occipital muscle - 6/10
 - Left SCM – 3/10
 - Dx: Severe muscle spasm of left masseter and severe capsulitis of left TMJ
 - Rx: Medrol dose pack for 6 days
 - Methylprednisolone 4mg
 - TPI done on left masseter and left capsule

Clinical Photos



Trigger Point Injections



Periodontal Charting

Chart	In Progress				Tx History				Forms				Attachments/Consents				Perio	Tx Plans				Medications				Labs					
																													MOBILITY		
		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P													FURCA	
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		3	2	2	3	2	2	3	1	2	2	1	3	2	1	3	2	1	2	2	1	4	2	1	4	2	1	3		CAL	
		3	2	2	3	2	2	3	1	2	2	1	3	2	1	3	2	1	2	2	1	4	3	1	4	2	1	3		P.D.	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			FGM	
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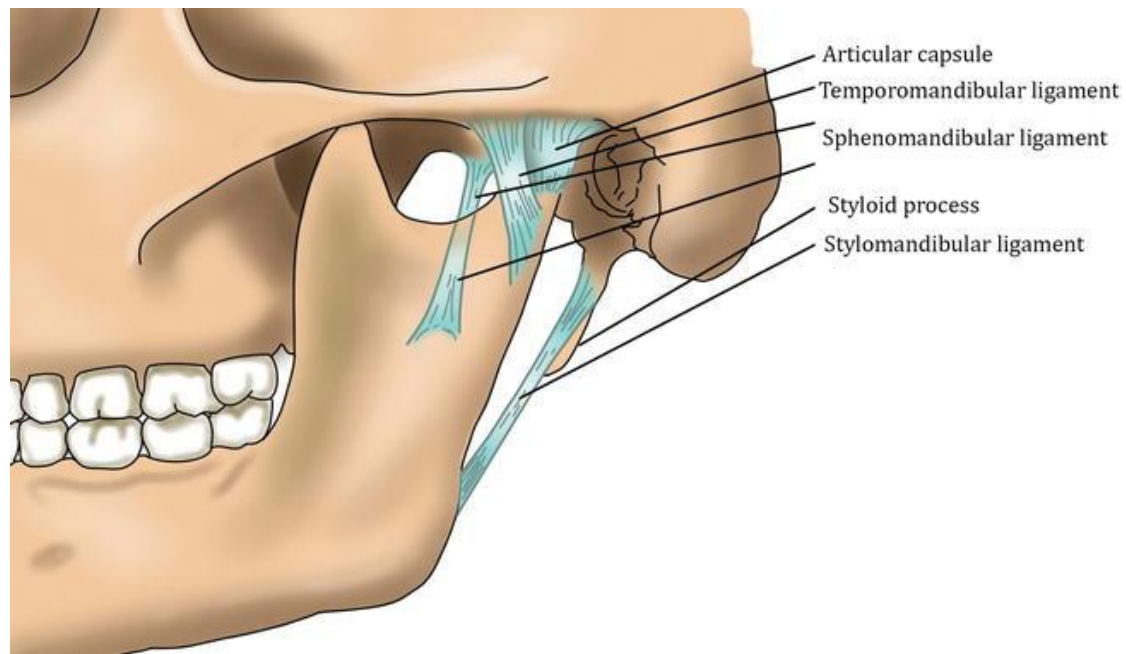
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		4	2	3	3	2	3	3	2	2	1	2	2	1	2	2	1	2	2	2	2	3	3	2	3	4				P.D.
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	P	P	P	P	P	P	P																							PLAQUE
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Diagnosis

- Severe muscle spasm of left masseter with severe capsulitis of the left TMJ

Problem List

- Caries
- Bruxism

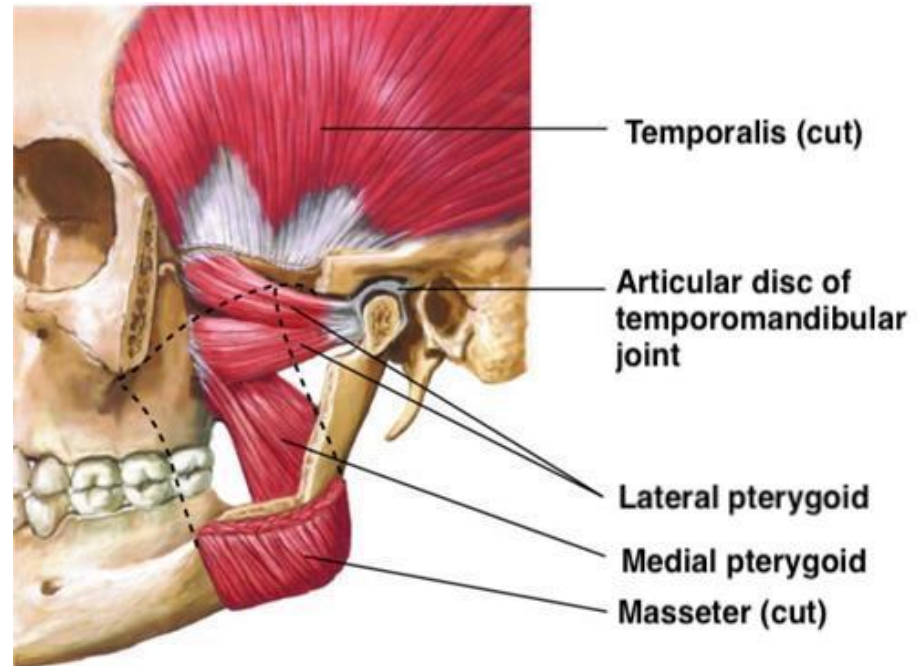


Ligaments of the TMJ

- Temporomandibular (lateral) ligament
- Sphenomandibular ligament
- Stylomandibular Ligament
- Pterygomandibular Ligament
- Pinto or malleolomandibular Ligament
- Temporomandibular Ligament

Muscles of the TMJ

- Temporalis
- Masseter
- Lateral Pterygoid
- Medial Pterygoid



D2 – Pathology

- What are the signs and symptoms of TMD?
 - Pain – occurs during mandibular movement or palpation
 - Myogenic: disorders of muscles of mastication, most common
 - Articular: joint disorders, derangement of condyle-disc complex, structural incompatibility with articular surfaces, inflammatory disorders of TMJ
 - Joint sounds
 - Clicking: uncoordinated movements of condylar head and articular disc
 - Crepitations: rough and irregular articular surfaces of TMJ
 - Restriction of mandibular movement
 - Muscular restriction, disc displacement, or ligament restriction
 - Condyle can become displaced from fossa – unable to close mouth

D2 – Pathology

- Other signs/symptoms
 - Dental symptoms
 - Tooth wear, mobility, pulpitis
 - Otologic symptoms
 - Auricular pain, tinnitus, itching in ear, vertigo
 - Headaches/migraines
 - Muscle pain in temporal region

D₃ PICO

- **Clinical Question:**

PICO Format

P:

I:

C:

O:

PICO Formatted Question

Clinical Bottom Line

Search Background

- **Date(s) of Search:**
- **Database(s) Used:**
- **Search Strategy/Keywords:**

Search Background

- **MESH terms used:**

Article 1 Citation, Introduction

- Citation: Authors, Title, Journal, Date, Volume, Page Numbers.
- Study Design:
- Study Need / Purpose:

Article 1 Synopsis

- 1-2 slides
- Method
- Results
- Conclusions
- Limitations

Article 1 Selection

- 1 slide
- Reason for selection
- Applicability to your patient
- Implications

Article 2 Citation, Introduction

- Citation: Authors, Title, Journal, Date, Volume, Page Numbers.
- Study Design:
- Study Need / Purpose:

Article 2 Synopsis

- 1-2 slides
- Method
- Results
- Conclusions
- Limitations

Article 2 Selection

- 1 slide
- Reason for selection
- Applicability to your patient
- Implications

Levels of Evidence

- ☐ **1a** – Clinical Practice Guideline, Meta-Analysis, Systematic Review of Randomized Control Trials (RCTs)
- ☐ **1b** – Individual RCT
- ☐ **2a** – Systematic Review of Cohort Studies
- ☐ **2b** – Individual Cohort Study
- ☐ **3** – Cross-sectional Studies, Ecologic Studies, “Outcomes” Research
- ☐ **4a** – Systematic Review of Case Control Studies
- ☐ **4b** – Individual Case Control Study
- ☐ **5** – Case Series, Case Reports
- ☐ **6** – Expert Opinion without explicit critical appraisal, Narrative Review
- ☐ **7** – Animal Research
- ☐ **8** – In Vitro Research

Double click table to activate check-boxes

Strength of Recommendation Taxonomy (SORT)

<input type="checkbox"/>	A – Consistent, good quality patient oriented evidence
<input type="checkbox"/>	B – Inconsistent or limited quality patient oriented evidence
<input type="checkbox"/>	C – Consensus, disease oriented evidence, usual practice, expert opinion, or case series for studies of diagnosis, treatment, prevention, or screening

Double click table to activate check-boxes

Conclusions: D₃

How does the evidence apply to this patient?

- Consider/weigh:
 - Literature
 - Group Leader & Specialist experience
 - Patient circumstances & preferences

Based on the above considerations, how will you advise your D₄?

Conclusions: D4

Based on your D3's bottom line recommendations, how will you ***advise*** your patient?

How will you ***help*** your patient?

Thank you!

