



# Treatment Planning Rounds Case

85-B, 3/26/2020



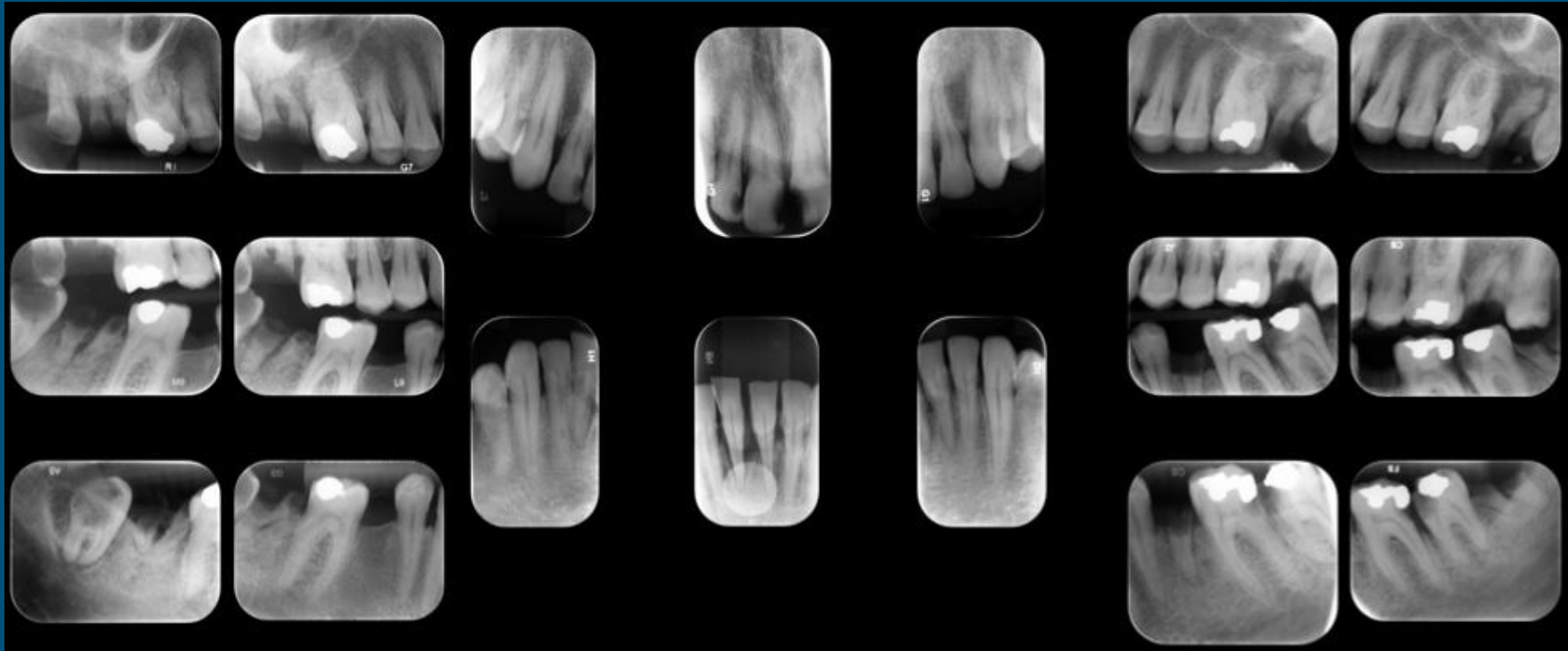
# Rounds Team

- Group Leader: Dr. Toburen
- Project Team Leader: Melanie Ladley
- Project Team Participants:
  - D3:Alexa Wiegand
  - D2: Emily Zall
  - D1:Matt White

# Patient

- 42 y.o. Caucasian female
- Chief complaint: “My two front teeth need to be fixed”
- Medical history:
  - No medications
  - Current cigarette smoker, not interested in quitting
  - Past marijuana user
  - High blood pressure and arthritis
  - Medical consult was sent out for bp, was determined stable
- Dental History:
  - Caries, amalgam restorations and extractions
  - Pt has not been to the dentist in 5 years

# Radiographs



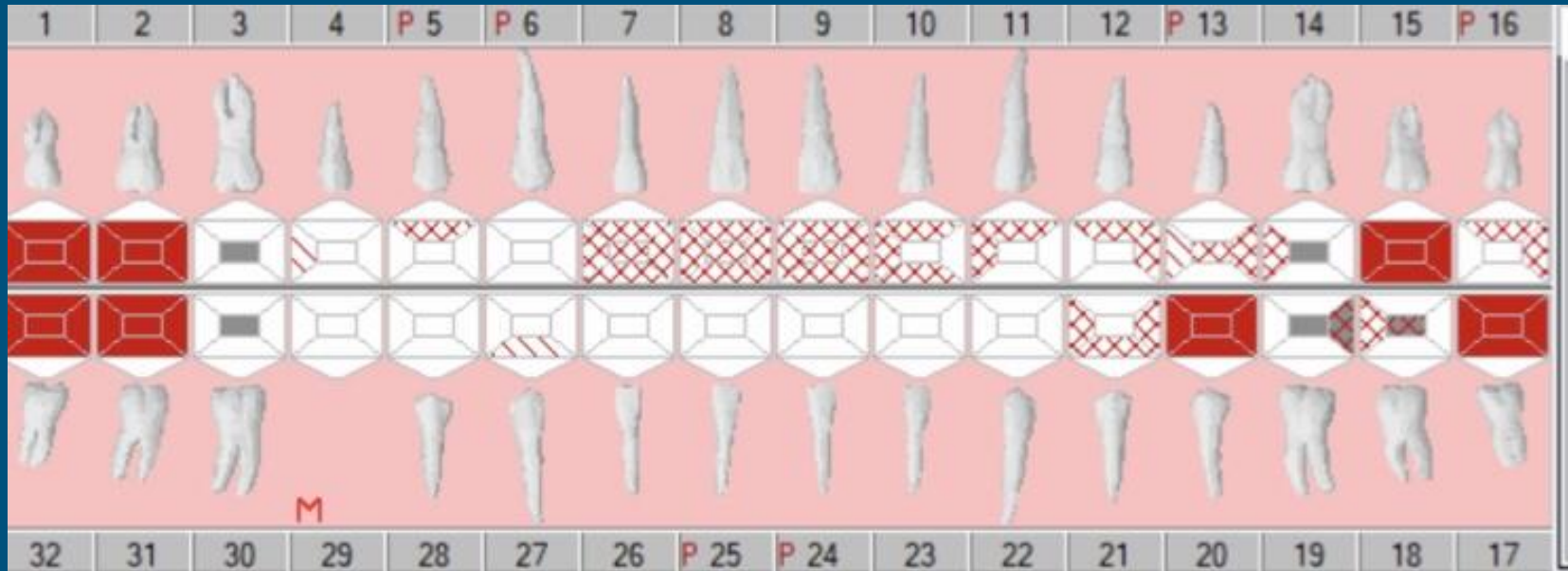
# Radiographic Findings

- Missing #29
- Retained root tips #1, 2, 15, 17, 20, 31
- Gross decay #32
- Recurrent decay #18 and #19
- Bone loss of mandibular anterior incisors
  - #23, #24, #25, #26
- Radiographic calculus



# Clinical Findings

- Pt denied clinical photos
- Generalized visible calculus and gross decay
- Crossbite of #3 and #4 with #30



# Relevant clinical photos

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Source: <https://myteethnvd.wordpress.com/2010/10/14/decayed-teeth/>



Source: [https://en.wikipedia.org/wiki/Calculus\\_\(dental\)](https://en.wikipedia.org/wiki/Calculus_(dental))

# Periodontal Charting

\*Pt had sensitivity to probing

[illegible][illegible]



# Periodontal

## Findings, Diagnosis, Prognosis

- AAP Designation: Stage III Localized Periodontitis
- Stability: Unstable
- Pockets not seen to be >4mm
  - Gross debridement needs to be done before accurate measurements can be taken
- Class I mobility of #23, #24, #26
- Class II mobility of #25
- Class I furcation of #14 and #18
- Fair prognosis

# Problem List

- Sensitivity
- Home care
- Caries
- Mobility
- Gross decay
- Missing teeth
- Esthetics
- Perio disease
- Periapical radiolucencies (?)

# Etiology

- Pt is a current smoker, has poor OHI, but diet does not seem consistent with health of teeth- especially the grossly decayed 2nd and 3rd molars

# Clinical Risk Assessments

- Perio risk: Medium
- Caries risk: High
- Oral Cancer risk: High
- Contributory factors: At home care and smoking

# Overall Case Prognosis

- Fair dependent on patients cooperation with at home care and reliability to make future appointments
- Individual tooth prognosis:

Hopeless: #1, 2, 15, 16, 17, 20, 31, 32

Questionable: #7, 8, 9, 18, 19

Fair: #5, 11, 12, 13, 14, 21

Good: #3, 4, 6, 22, 23, 24, 25, 26, 27, 28, 30

# Additional considerations

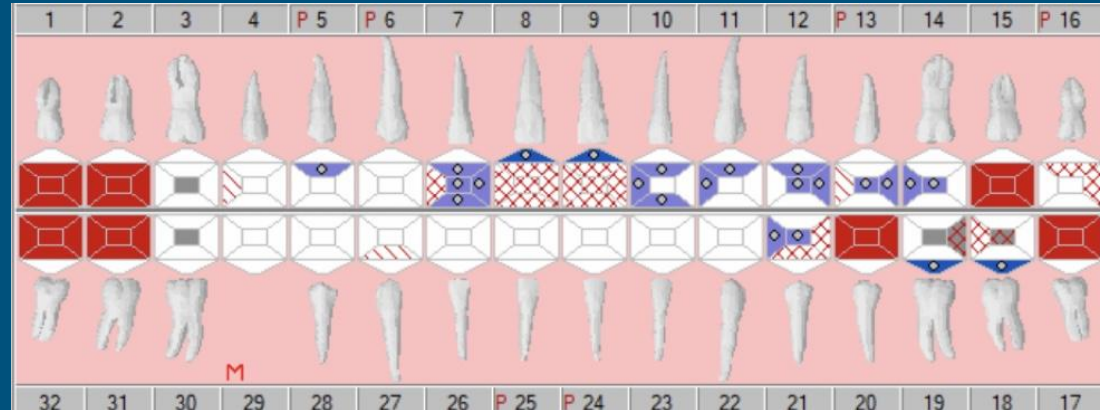
- Factors potentially affecting prognosis
  - **Health literacy**-Patients health literacy is low. Pt was more worried about losing #24 and #25 than addressing more pressing matters.
  - **Finances**-Pt is on state insurance and states anything beyond insurance may be difficult to afford
  - **Time constraints**-Pt works a full time job and needs to ask off of work 2 week prior to any appointment making last minute appointments almost impossible
  - **Anxiety**-pt states she possibly has white coat syndrome.
    - CORAH score:10

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- MODERATE PERIODONTITIS**
- SEVERE PERIODONTITIS**

# D2 Stage I Treatment Plan

## Establish Oral Health

(D1110) Propby-adult=\$57  
 (D0460) Pulp vitality test \$22  
 (D7240) Extraction, erupted tth/exp rt- #1, 2, 15, 16, 24, 25, 31=\$88x7=\$616  
 (D7210) Surg removal of erupted tooth-#17, 20, 32=\$133x3=\$399  
 (D2391) Resin-based comp.-1 surface. post (B)-#5=\$78  
 (D2335) 4+ surface anterior resin (MIFL)-#7=\$114  
 (M2180) Caries excavation-#8=\$0  
 (D3310) Endo therapy anterior-#8=\$252  
 (D2952) Post & core, indirect fab-#8=\$237  
 (M2180) Caries excavation-#9=\$0  
 (D3310) Endo therapy anterior-#9=\$252  
 (D2952) Post & core, indirect fab-#9=\$237  
 (D2332) 3 surface anterior resin (MLF)-#10=\$100  
 (D2331) 2 surface anterior resin (MF)-#11=\$86  
 (D2393) Resin-based comp 3 surf. Post. (DOB)-#12=\$120  
 (D2392) Resin-based comp 2 surface posterior (DO)-#13=\$94  
 (D2392) Resin-based comp 2 surface posterior (MO)-#14=\$94  
 (D3330) Endo therapy-molar #18=\$318  
 (D2952) Post & core, indirect fab-#18=\$237  
 (D3330) Endo therapy-molar-#19=\$318  
 (D2952) Post & core, indirect fab-#19=\$237  
 (D2392) Resin-based comp 2 surface posterior (MO)-#21=\$94



**Total: \$3,962**



# D2 Stage I Treatment Plan

## Establish Oral Health

- Risks/Benefits:
  - With Treatment
  - Without Treatment
- Prognosis: Questionable
- Time Frame: POE completed Feb 2020. All other stage I should be completed by August 2020 depending on endo needs and patients availability.
- Stage III: Patient should be put on 4mo recall and continue to work with her on OHI. Revist smoking cessation.

# D2 Stage I Treatment Plan

## Establish Oral Health

### Resources:

<https://www.webmd.com/smoking-cessation/features/10-overlooked-reasons-to-quit-smoking#1>

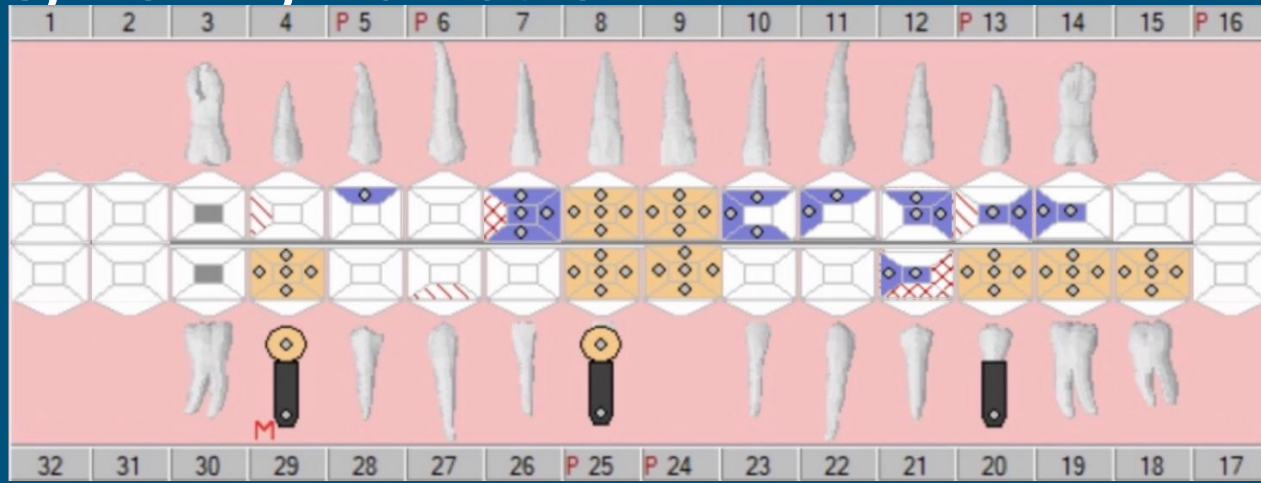
<https://www.quit.com/quit-smoking/understand/effects-of-smoking.html>

Chapple, I. L. C., Bouchard, P., Cagetti, M. G., Campus, G., Carra, M.-C., Cocco, F., Schulte, A. G. (2017, March). Interaction of lifestyle, behaviour or systemic diseases with dental caries and periodontal diseases: consensus report of group 2 of the joint EFP/ORCA workshop on the boundaries between caries and periodontal diseases. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/28266114>

Jiang, X., Jiang, X., Wang, Y., & Huang, R. (2019, April 19). Correlation between tobacco smoking and dental caries: A systematic review and meta-analysis. Retrieved from [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6662788/#\\_\\_ffn\\_sectitle](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6662788/#__ffn_sectitle)

# D3 Stage II “Ideal” Treatment Plan

## Esthetics, Form, Function



(D2740) Porcelain crn. Ceramic substance-#8=\$420

(LD2740) Porcelain crn. Ceramic substance-#8=\$0

(D2740) Porcelain crn. Ceramic substance-#9=\$420

(LD2740) Porcelain crn. Ceramic substance-#9=\$0

(D27040) Porcelain crn. Ceramic substance-#18=\$420

(LD2740) Porcelain crn. Ceramic substance-#18=\$0

(D2740) Porcelain crn. Ceramic substance-#19=\$420

(LD2740) Porcelain crn. Ceramic substance-#19=\$0

(D0365) Cone Beam CT lower arch=\$235

(D6190) Surgical Guide 2-4 Implants=\$436

(D7953) Bone graft for ridge-#24=\$500

(D7953) Bone graft for ridge-#25=\$500

(D6010) Surg placement, endosteal impl-#20=\$788

(D6066) Implant-PFM, high noble metal-#20=\$735

(LD6066) Implant supported porcelain fused to metal crown-#20=\$0

(D6010) Surg placement, endosteal imp-#25=\$788

(D6075) Implant-retainer for cer FPD-#25=\$779

(LDBRID) Bridge lab procedure-#25=\$0

(D6245) Pontic-porcelain/ceramic-#25=\$420

(D6010) Surg placement, endosteal impl-#29=735

(D6066) Implant-PFM, high noble metal-#29=\$735

(LD6066) Implant supported porcelain fused to metal crown-#29=\$0

**Total: \$9,845**

# D3 Stage II “Ideal” Treatment Plan

## Esthetics, Form, Function

- Risks to no treatment
  - Caries progression, pain, tooth loss, bone loss
- Benefits to treatment
  - Gingival health, caries control, sufficient chewing surfaces, decreased sensitivity
- Timeline-1 year
- Challenges
  - Health literacy, Reliability and finances
- Stage III
  - 3-4 month recall, reinforcing OHI, revisiting smoking cessation
- Advising the patient

# D3 Stage II “Ideal” Treatment Plan

## Esthetics, Form, Function

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- Resources

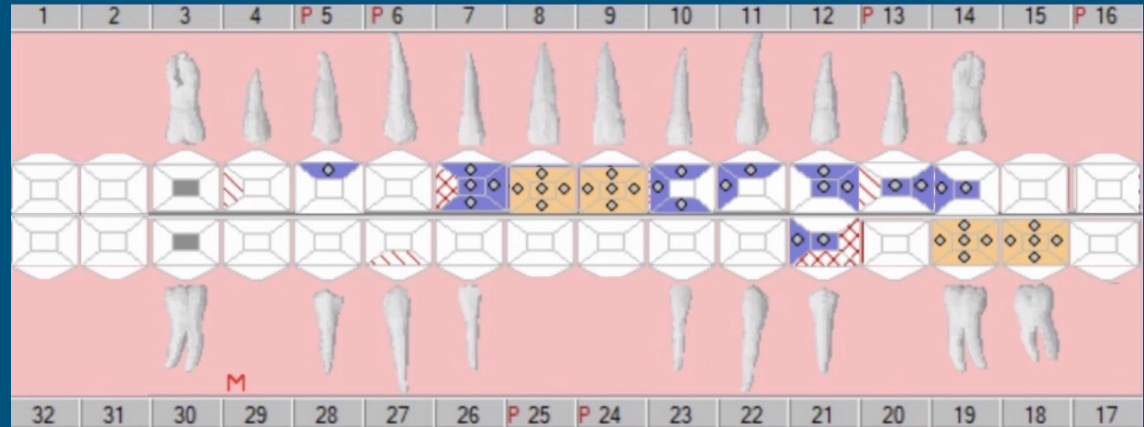
- Consults with Dr. Almeida, Dr. Reiger, Dr. LeMoine, Dr. Morales, Dr. Al bitar and Dr. An.
- Clinical Practice Guideline
  - A. Roccuzzo et al. Implant-supported 2-unit cantilevers compared with single crowns on adjacent implants: A comparative retrospective case series. The Journal of Prosthodontics Dentistry. 2019.
- Lay Literature
  - <https://www.youtube.com/watch?v=QkdRk7NG130>
  - MKE lifestyle March 2020 edition

# D4 Alternate “Real” Stage II Plan

## Esthetics, Form, Function

- The patient is a young smoker that also presents with some financial limitations. Restoring function, esthetics, while eliminating disease are the primary goals with the alternate plan

(D5226) Partial denture-mandibular arch=\$500  
(D02740) Porcelain crown-#8=\$420  
(LD2740) Porcelain crown-#8=\$420  
(D02740) Porcelain crown-#9=\$420  
(LD2740) Porcelain crown-#9=\$420  
(D2750) Porcelain fused to metal crown-#19=\$420  
(LD2750) Porcelain fused to metal crown-#19=\$420  
**Total: \$3,020**



# D4 Alternate “Real” Stage II Plan

- **Benefits-** Controlling caries progression and giving patient sufficient chewing surfaces. Benefits will also include improvement in gingival health as well as esthetics
- **Risks-** Risks of no treatment would be continual decay of carious teeth and pain due to infection of necrotic teeth. After extractions the patient will be limited to 1st molar to 1st molar occlusion. If the teeth extracted are not replaced more force will be placed on more anterior teeth which could lead to further mobility and bone loss
- **How will you advise your patient?**

It is important for this patient to emphasize the necessity of eliminating the diseased teeth through extractions and possible endodontic treatment. Replacing the extracted teeth are not only beneficial in terms of esthetics, but also form and function.

- **Stage III:** Stage III will include 3 or 4 month recalls to ensure the patient is keeping up with her oral hygiene and to reinforce OHI.

Smoking cessation also needs to be included in OHI.

Due to current use of alcohol and cigarettes as well as a past marijuana use the pt has a higher risk for oral cancer so it is important to monitor the soft tissue at every recall appointment.

# D4 Decision-making process:

## Which factor did you lean on most heavily?

### 1. Patient Preferences

- Clinical: Pt's current oral hygiene as well as her current smoking habit was considered when coming up with an alternate tx plan
- Pt does have financial considerations

### 2. Evidence

- Arita, S., Gonda, T., Togawa, H., Maeda, Y., & Ikebe, K. (2020). Influence of mandibular free-end partial edentulism on the force exerted on maxillary anterior teeth. *Journal of Prosthodontic Research*. doi: 10.1016/j.jpor.2019.12.004
- Lay literature: Colgate- Are Removable Partial Dentures Right For You?

### 3. Clinician expertise

- General dentist: Dr. Toburen
- Specialist: Consults with Dr. An, Gaffney, Morales, Almeida and Reiger.



# Team Consensus: Stage III Tx Plan

## Maintenance Phase

- **Patient compliance, prognosis:** Pt currently exhibits for oral hygiene and a low dental IQ. Thus an emphasis on OHI is necessary for pt compliance and success of eventual treatment.  
What may motivate the patient?  
**Educational focus for the patient:** Perio, Home care, and caries prevention
  - ***Home care recommendations:***  
Recommended maintenance interval: 3 or 4 month recalls. Pt's pockets are not deep enough for SRP but due to the radiographic calculus Dr. Morales recommends something "deeper" than a D1110.
- **D1 Recommendation:** Emphasis on smoking cessation. Especially if implants are the desired option

# Disposition of the case

- Pt has only seen twice in clinic in those two appointments it was evident that finances were something that needs to be considered when deciding on a treatment plan for this patient, but the patient still needs to have all options presented to her.



# Questions?