

Clinical Case Study 1

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Patient Information

Patient's name is M.T., a 23 year old Asian male.

Start smoking 6 years ago, uses e-cigarette daily, changes filter every 2 days.

Last dental cleaning was 6 months ago before invisalign.

Patient is under invisalign treatment for 5 months, uses Sonicare power toothbrush, changes head every 4 months, uses Listerine cool mint mouthwash daily, does not use any interdental aid.

Chief Complaint

“My teeth look dirty, I want a dental cleaning.”

Patient also complains some sort of sensitivity on cold and hot.

Before Treatment



Medical history

Last physical exam is within 1 year, no significant medical condition, no known allergy.

Vital signs: BP 126/82, pulse 61, corresponding to HTN stage I. patient reported that no family history of HTN.

ASA 2.

Patient was otherwise in general good health, not taking any prescribed medications nor nutrition supplement.

Clinical Findings

Extraoral examination: multiple red poor-demarcated acne on patient's chin, cheeks, nose, and neck.

Intraoral examination: bilateral red and enlarged tonsils, asymptomatic; white coated tongue,

Gingival statement: generalized brown pigmentation, irregular shape, bulbous papillae, retractable margin, shiny texture, soft consistency.

Attrition on maxillary and mandibular anterior teeth.

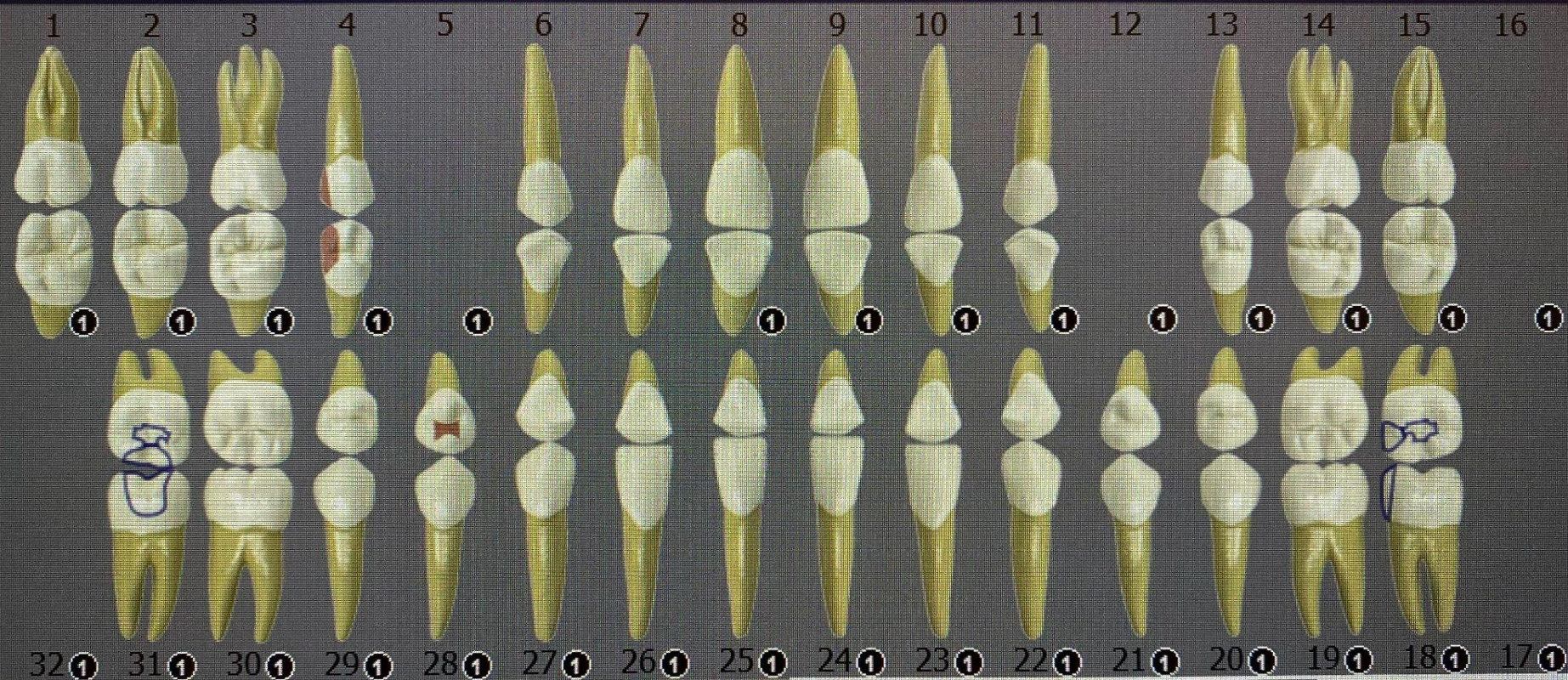
Clinical Findings Continue

Teeth #5, 12 previously extracted due to crowded alignment for invisalign treatment.

Generalized 2-4 mm pocket depth, localized 5 mm on maxillary posterior teeth, generalized BOP, 2 mm gingival recession noted on #27F and #26L, mobility noted on #23-26, no furcation involved.

Occlusal: bilateral first molar class II. Overjet 7-9mm. Overbite 30%.

Generalized heavy subgingival interproximal calculus detected.



Charting Images Treatment Plan(s) Alerts Notes Clinical Notes X-Ray Images

| | | | | | | | | | | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| Plaque | | | | | | | | | | | | | | | |
| Mobility | | | | | | | | | | | | | | | |
| Bone Loss | | | | | | | | | | | | | | | |
| CAL | | | | | | | | | | | | | | | |
| GM | | | | | | | | | | | | | | | |
| PD | 3 2 2 | 2 2 2 | 3 2 3 | 2 2 2 | 2 2 3 | 3 3 3 | 3 1 4 | 3 2 3 | 3 2 3 | 3 2 3 | 2 2 2 | 2 2 3 | 3 2 3 | | |
| Furcation | | | | | | | | | | | | | | | |
| PD | 3 5 3 | 4 2 4 | 3 2 3 | 3 2 2 | 2 2 3 | 3 3 3 | 3 2 3 | 2 2 2 | 2 2 3 | 3 1 3 | 5 1 2 | 3 2 5 | 3 2 3 | | |
| GM | | | | | | | | | | | | | | | |
| CAL | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | 10 | 11 | 13 | 14 | 15 | | |

Buccal
Lingual

| | | | | | | | | |
|---|---|---|--------------------------------------|--|----------------|------------------|------------------|------------------------------|
| 1 | 2 | 3 | <input type="checkbox"/> Bleeding | <input checked="" type="checkbox"/> PD | Probing Depths | Furcation: 0 0 0 | Mobility: 0 | <input type="checkbox"/> MGD |
| 6 | 5 | 4 | <input type="checkbox"/> Suppuration | <input type="checkbox"/> GM | | Plaque: _____ | Bone Loss: _____ | |
| | | | <input type="checkbox"/> CAL | | | | | |

| | | | | | | | | | | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Plaque | | | | | | | | | | | | | | | |
| Mobility | | | | | | | | | | | | | | | |
| Bone Loss | | | | | | | | | | | | | | | |
| CAL | | | | | | | | | | | | | | | |
| GM | | | | | | | | | | | | | | | |
| PD | 4 2 4 | 3 2 3 | 3 2 4 | 3 2 3 | 4 3 4 | 3 1 2 | 2 1 2 | 2 1 2 | 2 2 2 | 2 2 2 | 3 2 3 | 3 3 4 | 3 2 4 | 3 2 3 | |
| Furcation | | | | | | | | | | | | | | | |
| PD | 4 3 3 | 2 2 2 | 2 1 2 | 2 1 2 | 2 1 4 | 5 3 3 | 2 2 3 | 2 2 2 | 2 2 3 | 2 2 3 | 3 3 3 | 3 2 3 | 3 2 2 | 3 2 3 | |
| GM | | | | | | | | | | | | | | | |
| CAL | | | | | | | | | | | | | | | |
| MGD | | | | | | | | | | | | | | | |
| | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | |

Lingual
Buccal

1
4
7
10
13

Notes:

Radiographic Findings

FMS was taken to further evaluate patient's oral condition.

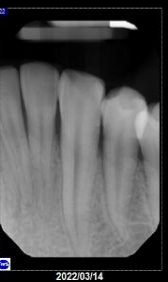
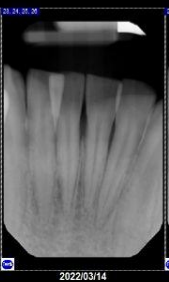
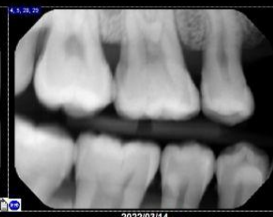
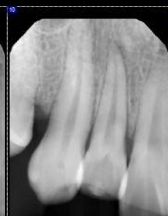
Dilaceration noted on #4,10,28.

Active caries noted on #4 distal.

Microdontia noted on #1,15.

Periapical radiolucency noted on #7.

Generalized horizontal 30% bone loss, localized 40% bone loss on mandibular anterior



Case Value

After completion of all assessments with radiograph, it is determined that the patient was heavy calculus case, Periodontitis Stage II, grade B, due to bone loss and smoke habits.

Caries risk: moderate, due to #4D active caries presents on the radiograph and #28O suspicious caires presents clinically. Patient states that his dentist notices the suspicious caries on #28O, and will monitor it.

Referral

Referral was given to the patient for HTN, #4D active caries, and mandibular anterior mobility teeth.

Treatment Plan: total 3 visits needed

Visit 1: all assessments were completed, and FMS were exposed. Explained the purpose and the implication of the findings of each assessment to the patient while performing. Showed location of disclosing solution to the patient on mirror, introduced 45° brush method with power toothbrush.

Educated patient the relationship between tobacco products and oral conditions, such as xerostomia, nicotine stomatitis, periodontal disease, and oral cancer. Showed radiographic findings to patient, especially the moderate to severe bone loss compare to his age (23 years old).

Visit 2

Patient stated that he started quitting smoke, changed e-cigarette to cigarette, and only 2 cigarettes a day. Also, patient started practicing how to use strip floss.

Administered 1 carpule of 2% lidocaine with 1:100,000 epi on long buccal, mental, and lingual nerve on quadrant 4, negative aspiration.

Administered 1 carpule of 2% lidocaine with 1:100,000 epi on PSA, MSA, ASA on quadrant 1, negative aspiration.

Ultrasonic and hand scaled completed quadrant #1,4, patient tolerated procedure well.

Post-op instruction given to the patient.

Visit 3

Patient stated that he quitted smoke completely, not using any tobacco product for a week.

Quadrant #1,4 gingival present less inflammation, gingival margin still slightly retractable but less enlarge, bulbous papillae were shrank after treatment.

Patient declined local anesthesia for this visit.

Ultrasonic and hand scaled completed quadrant #2,3 with 20% benzocaine topical gel, patient tolerated procedure well.

Engine polishing and 5% varnish fluoride was applied.

Post-op instruction given to the patient.

After treatment



Recommendation

Since patient's periodontal status, recommended patient having dental cleaning every 3 month, keep practicing floss daily, and use Listerine Ultraclean Tartar Control mouthwash due to stain presents on some teeth surface and around the attachment of invisalign.