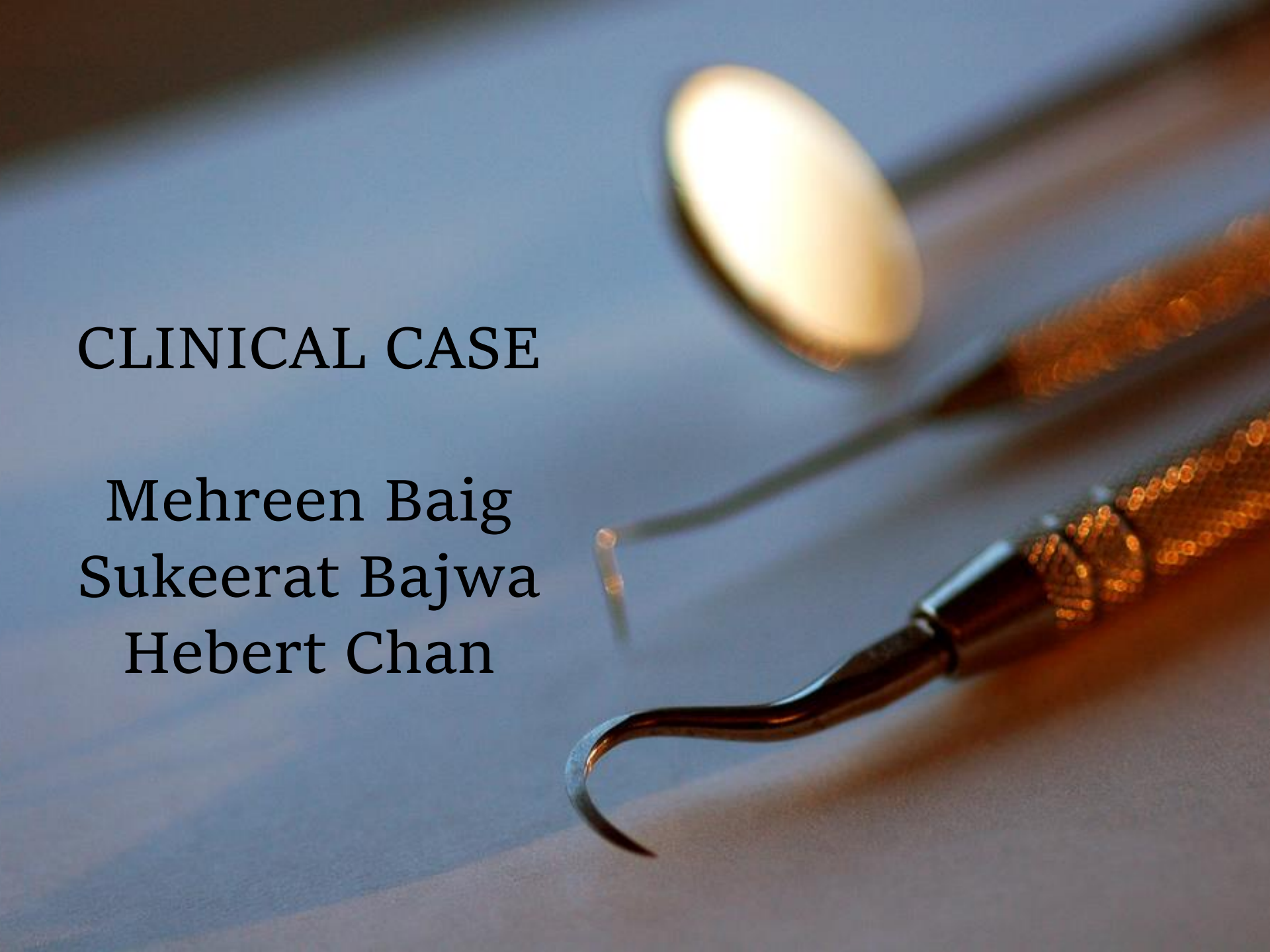


CLINICAL CASE

Mehreen Baig
Sukeerat Bajwa
Hebert Chan

CASE PRESENTATION

Patient: B. L

Chief Complaint:

- “Routine check up and cleaning”

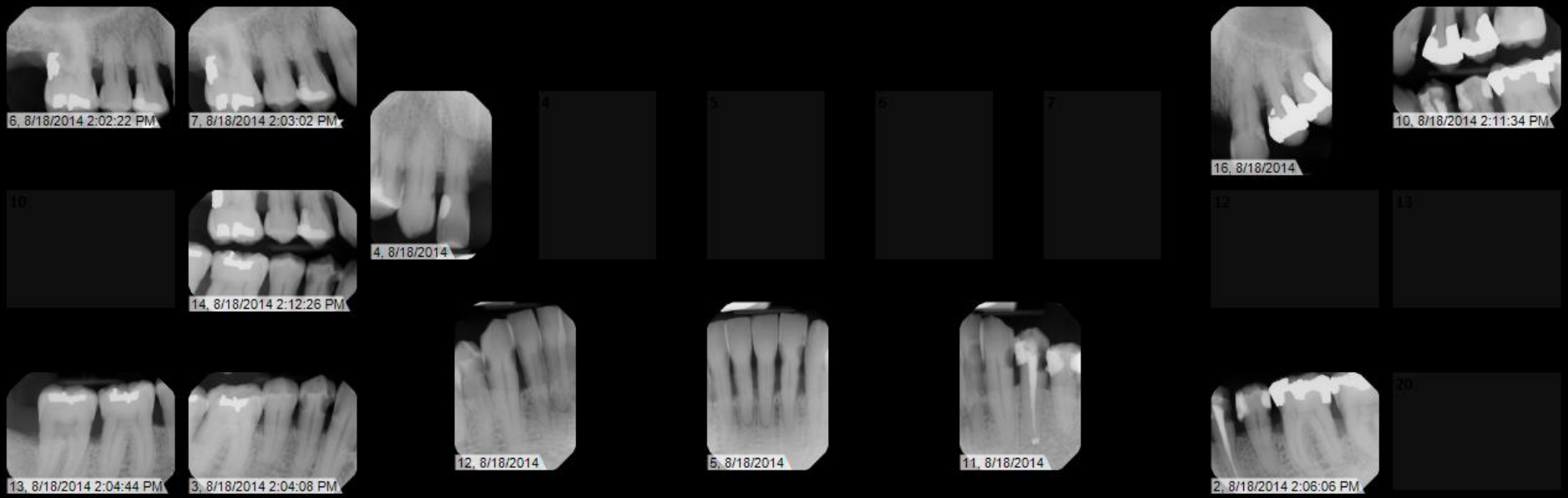
Medical and Social History:

- HTN, Depression, Anxiety, past history of methamphetamines abuse for 3 years
- Patient is currently undergoing psychiatric therapy and counseling
- NKDA

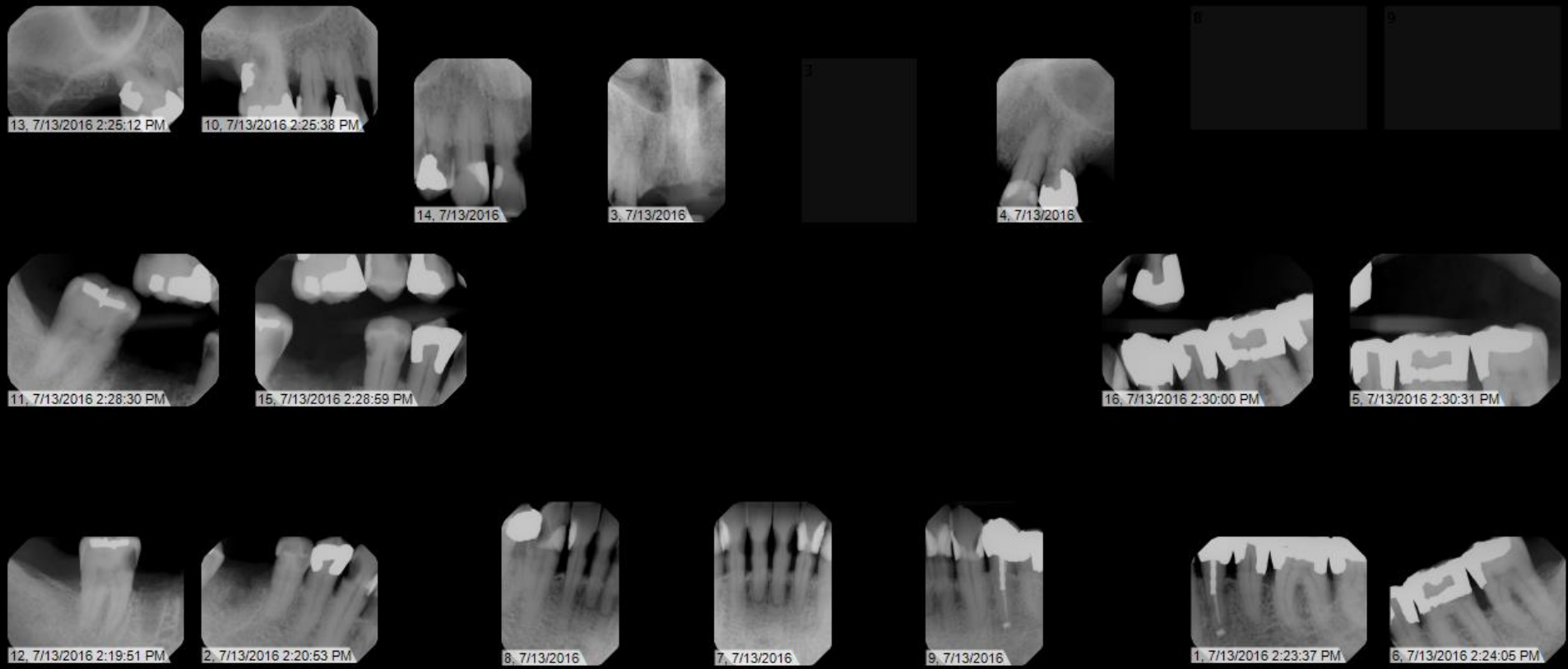
Dental History:

- Patient has been coming to BDC for over 4 years in order to get dental care.
- High to Extreme caries risk.
- History of multiple recurrent carious lesions.
- Poor oral habits (late night snacker)
- Current Periodontal Dx: Generalized moderate chronic periodontitis

RADIOGRAPHS
Past POE



RADIOGRAPHS
Most recent POE



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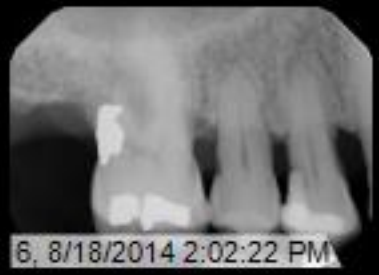
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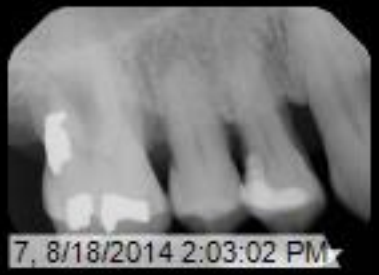
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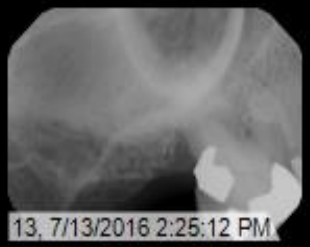
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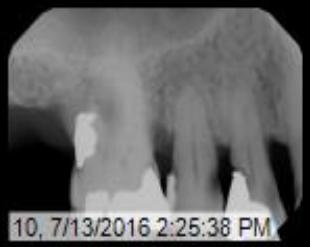
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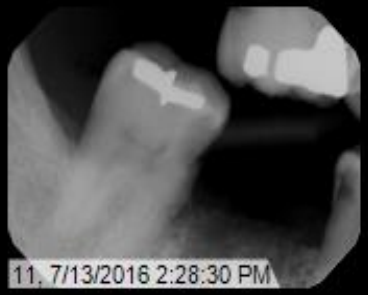
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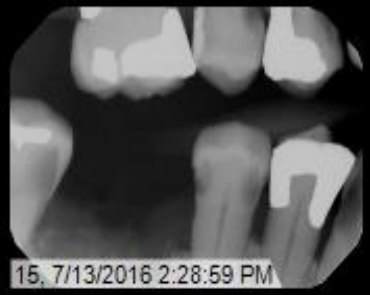
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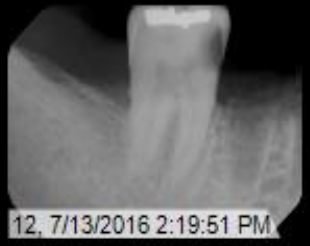
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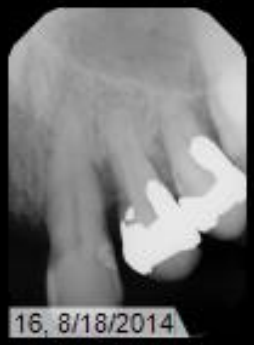
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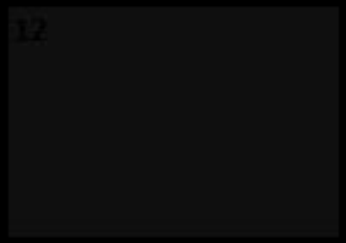

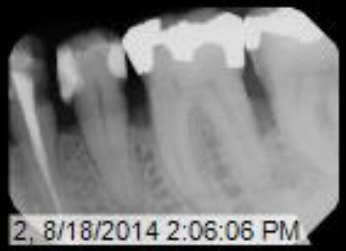
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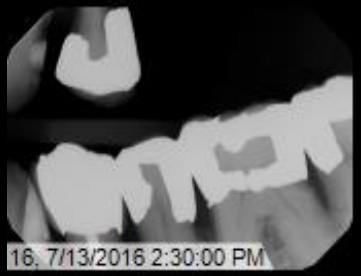
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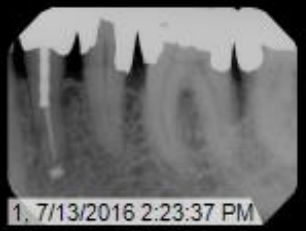
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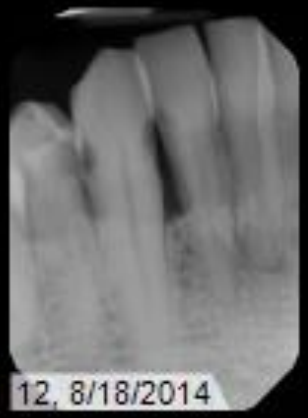
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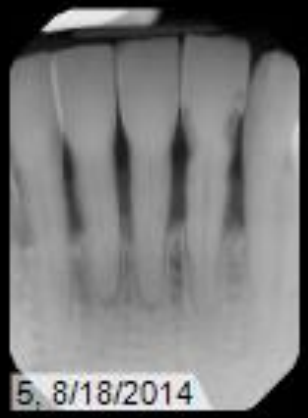
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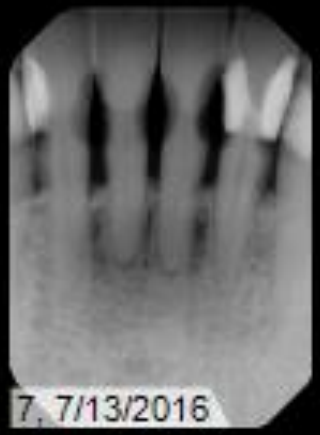
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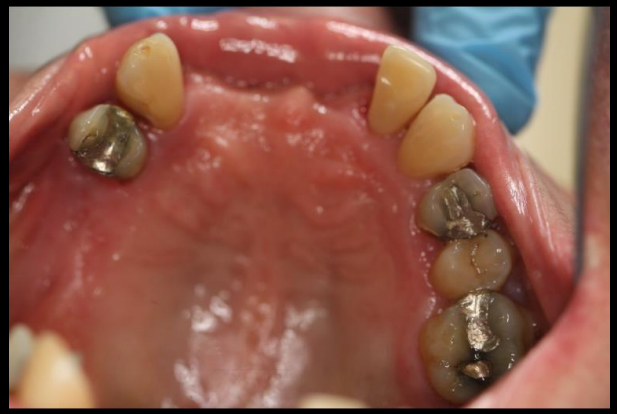

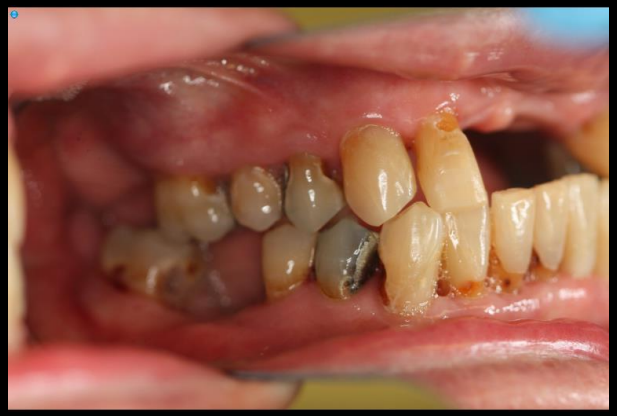

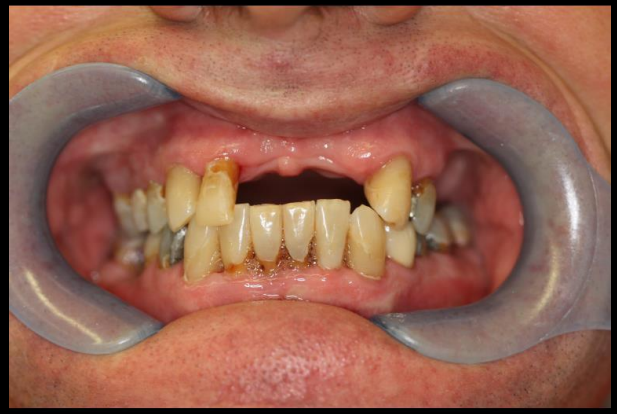

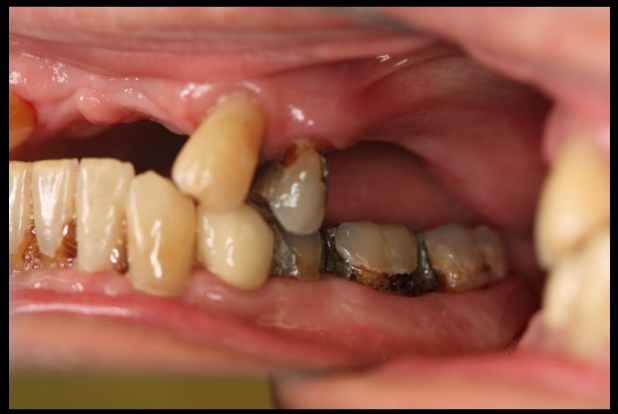

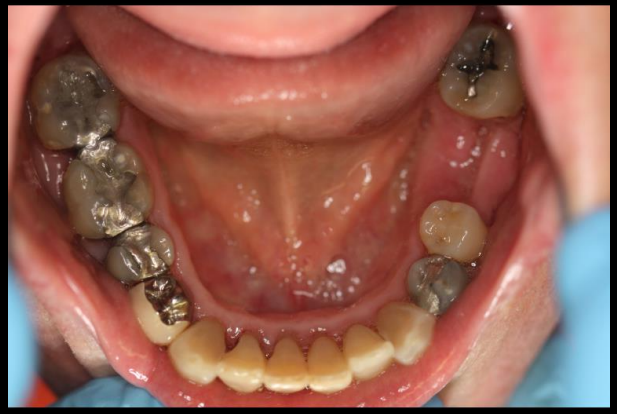

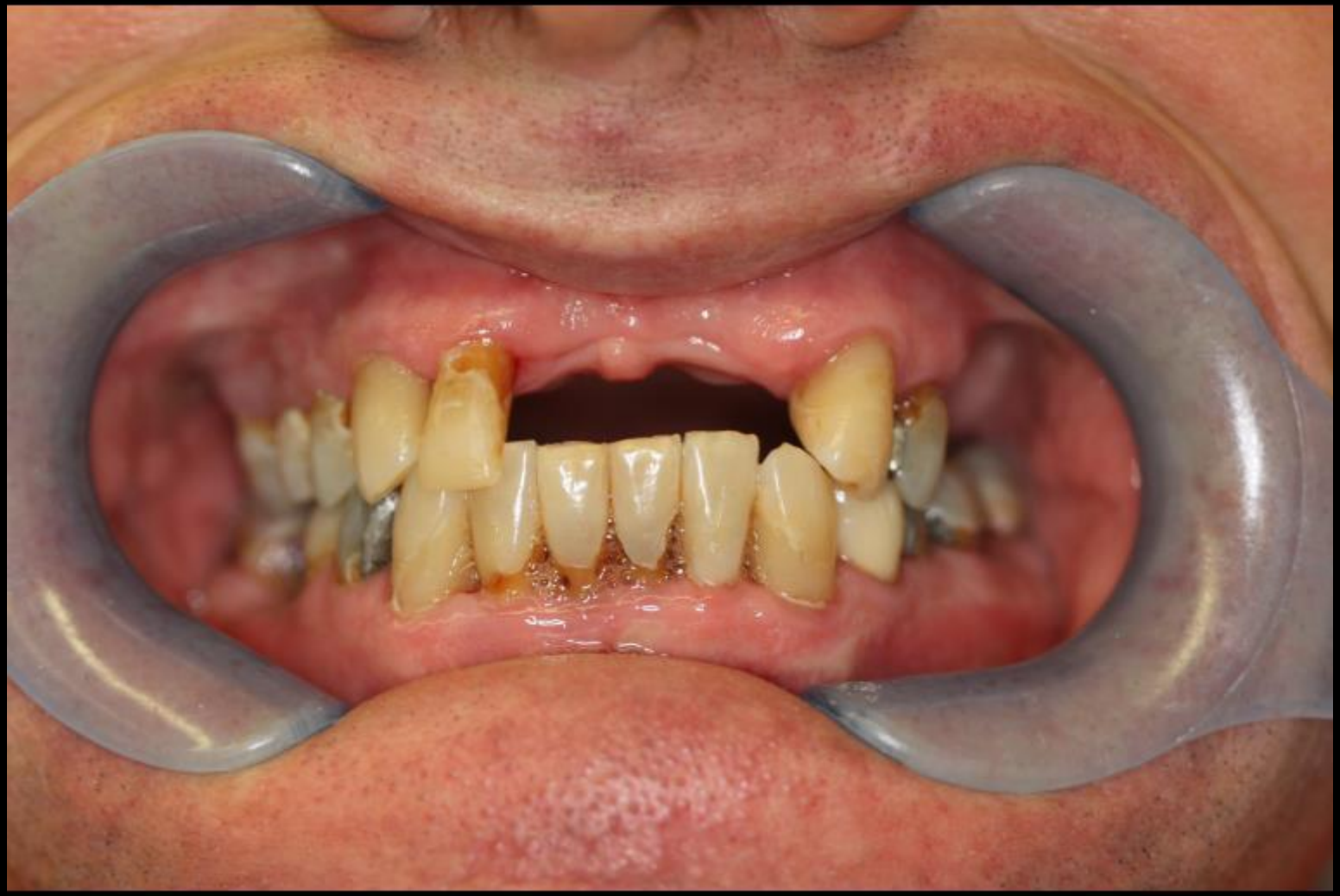

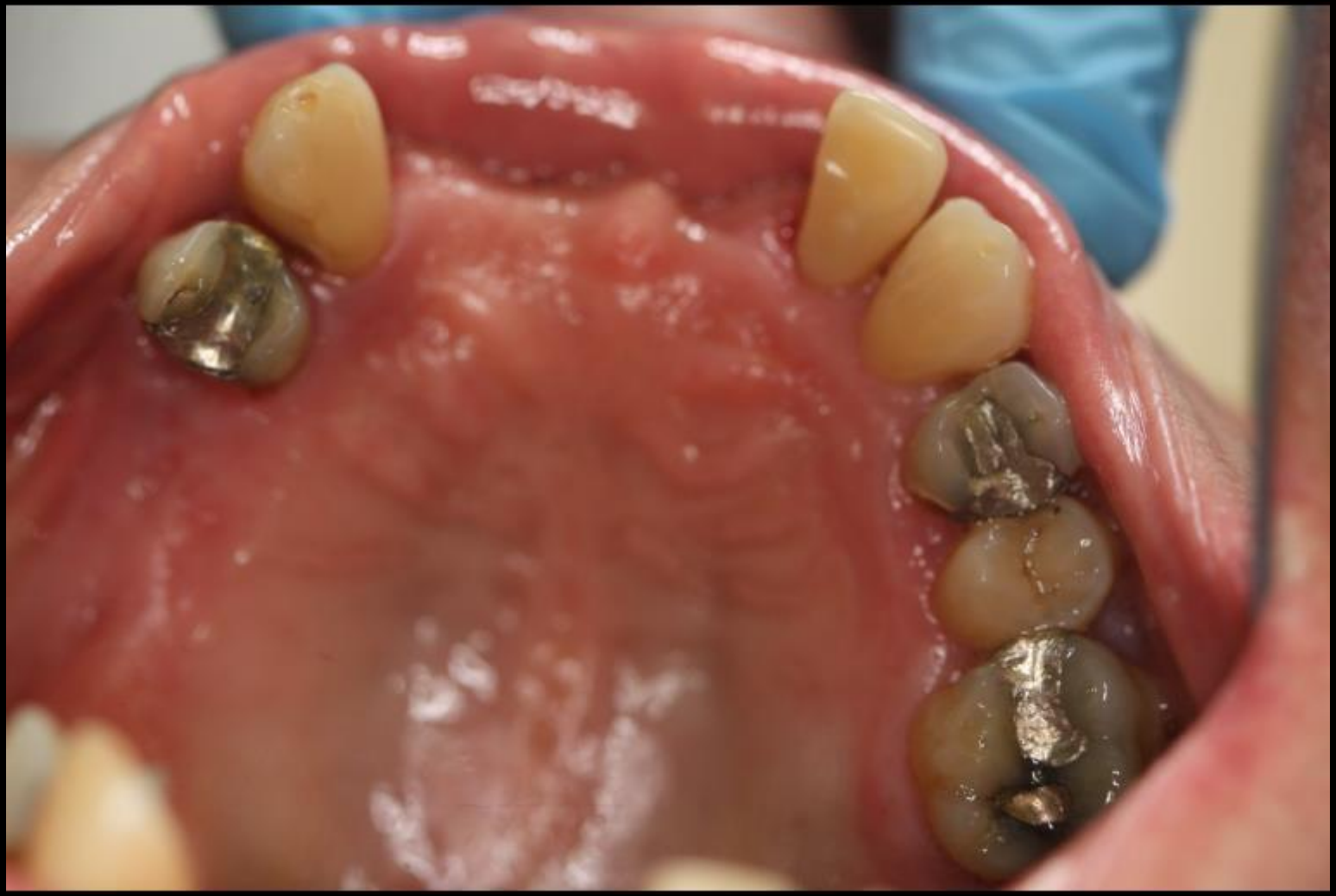

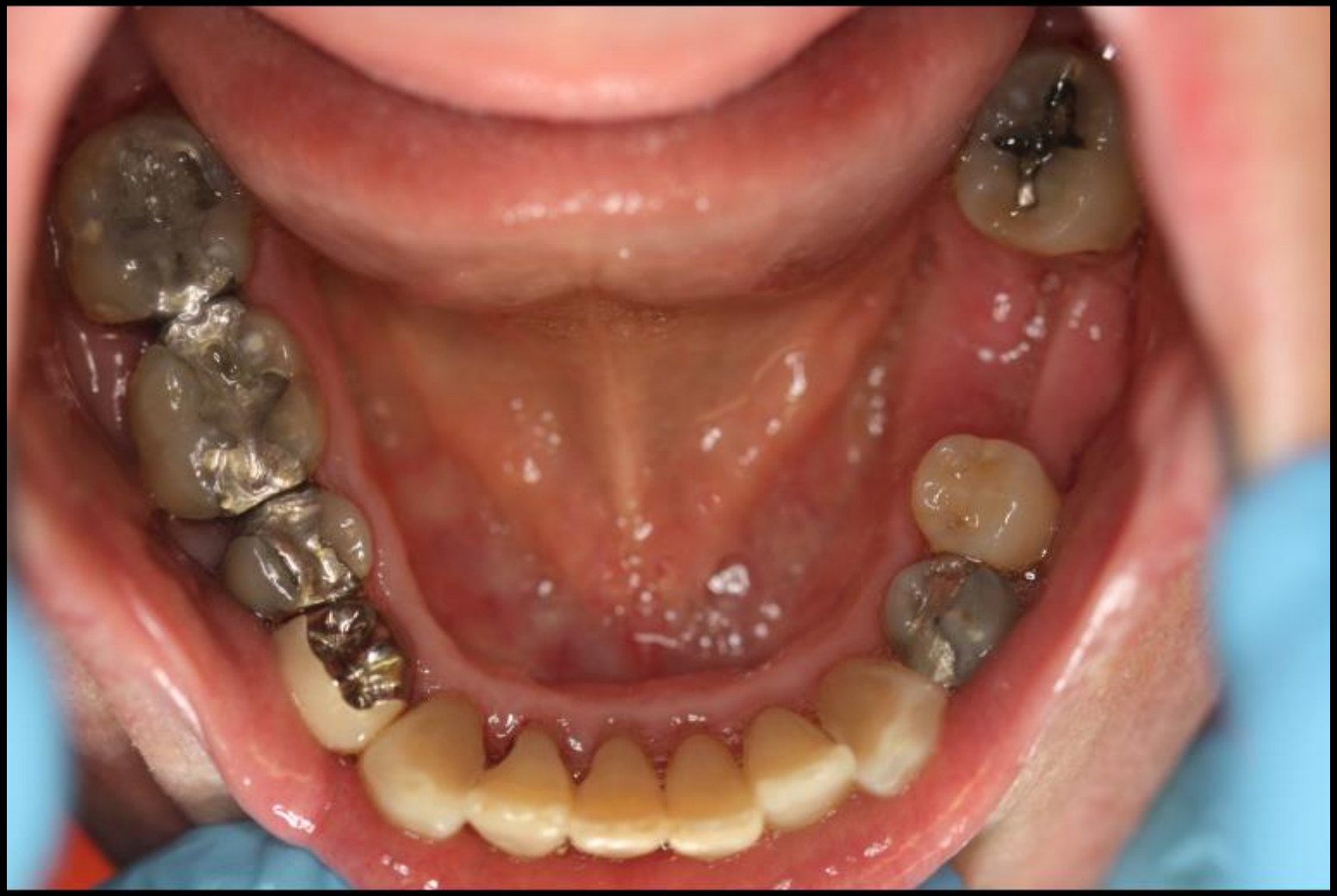

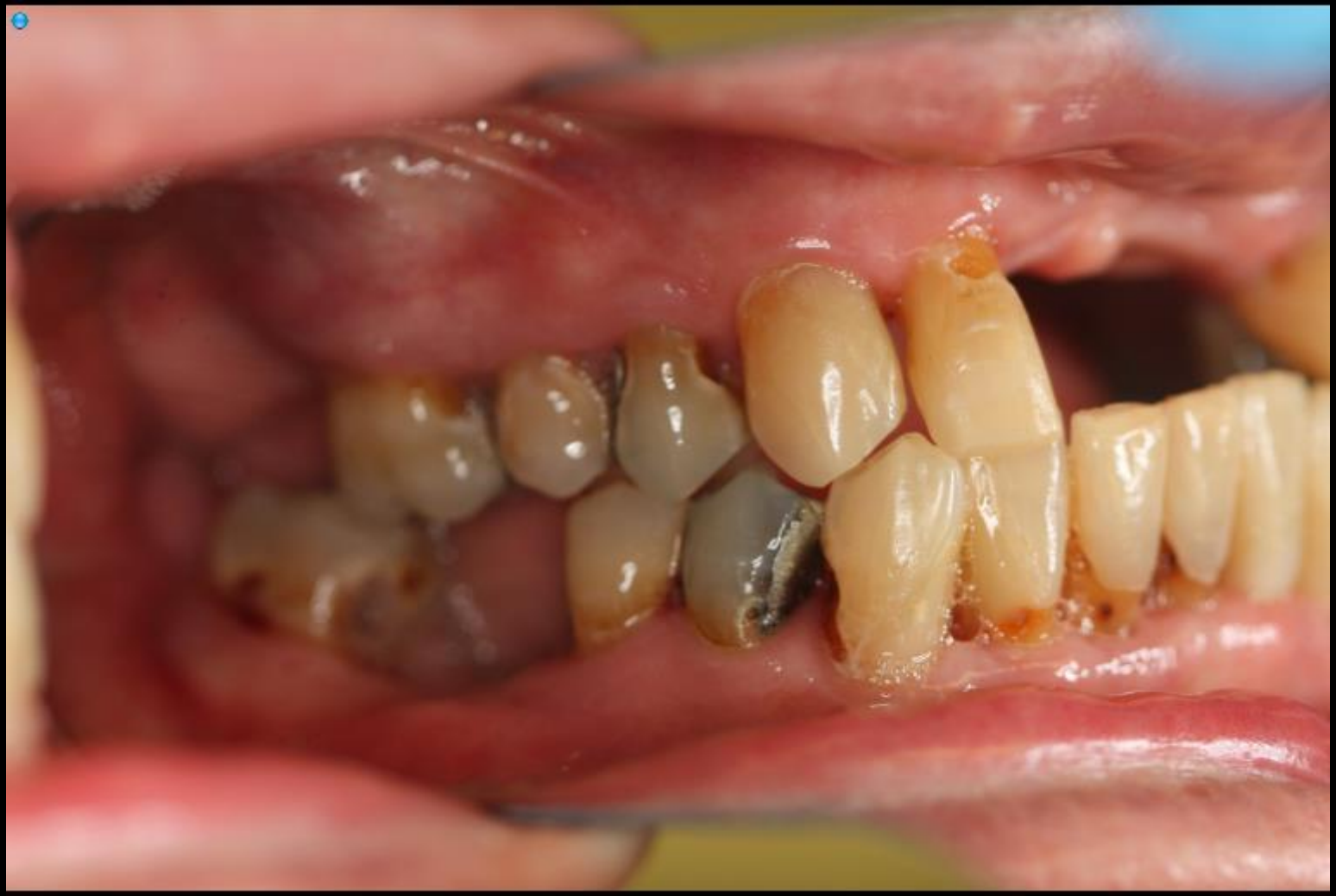

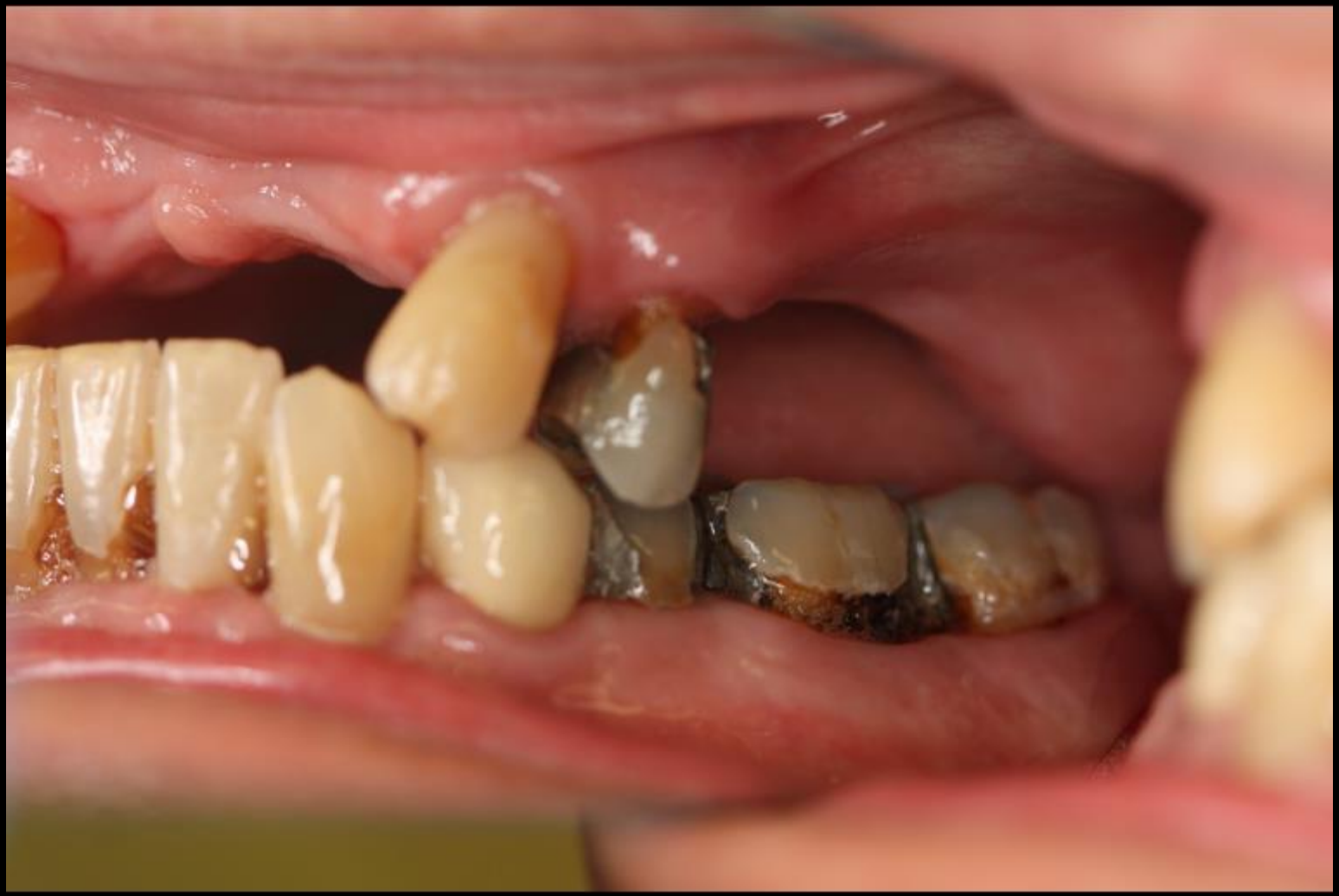

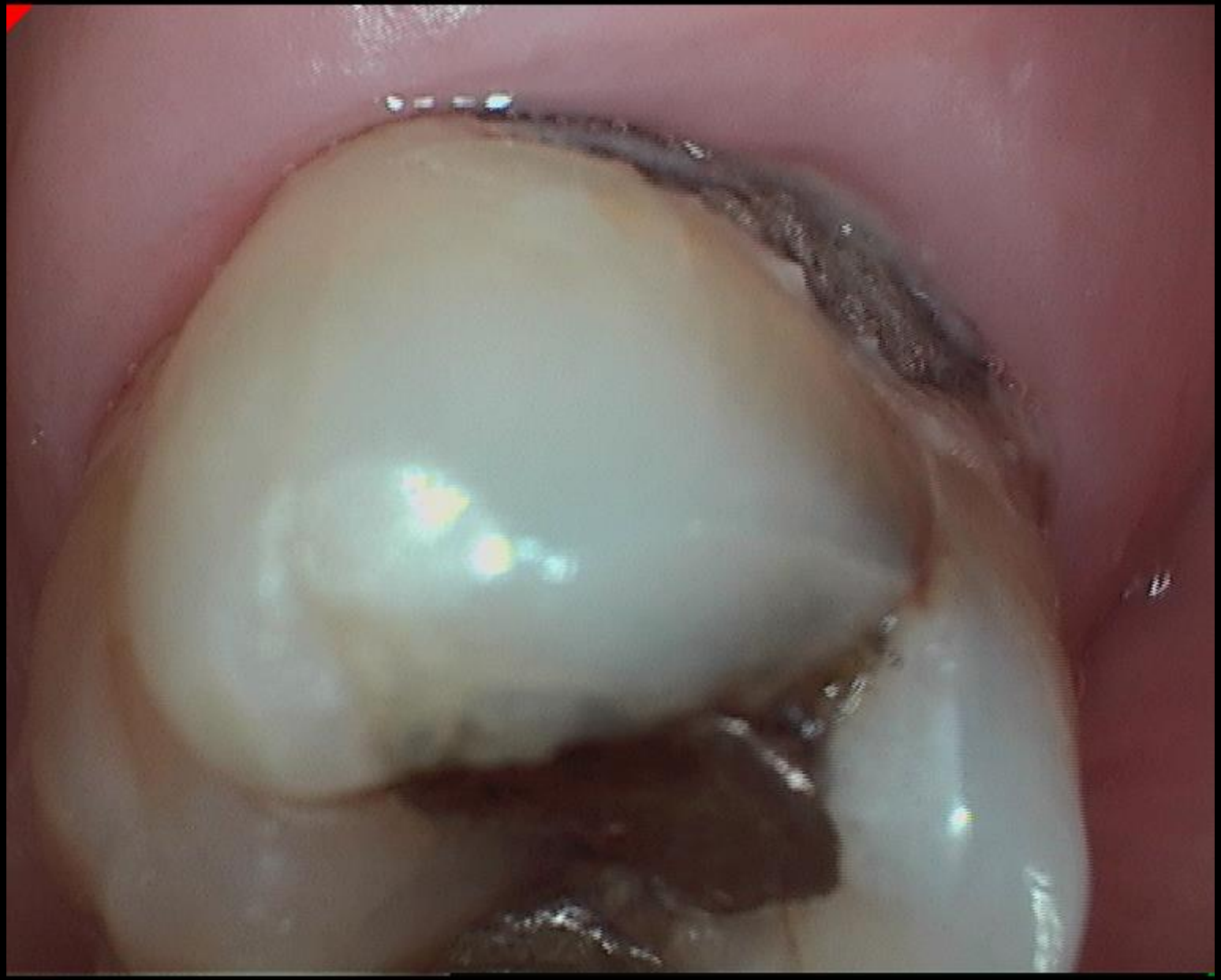

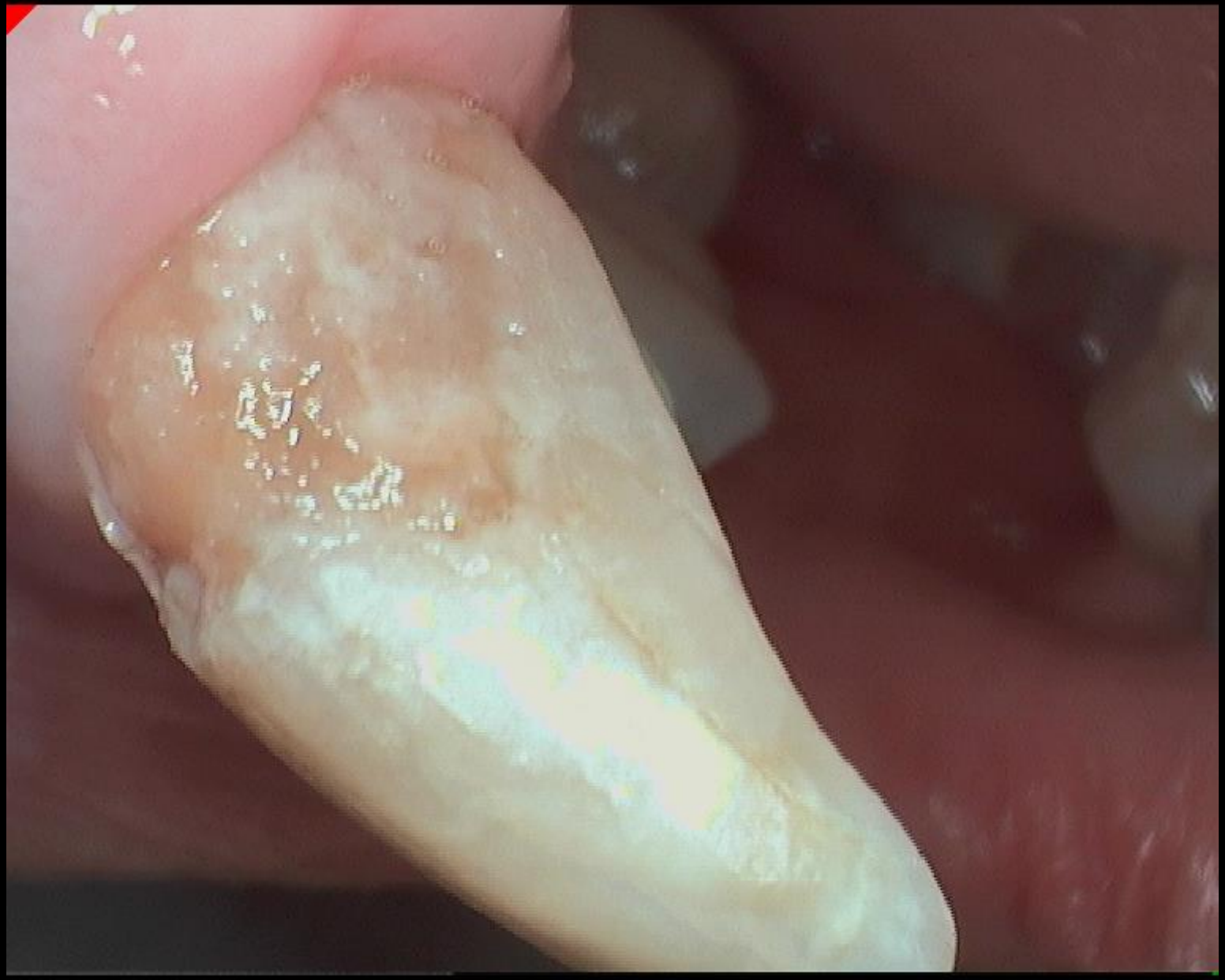

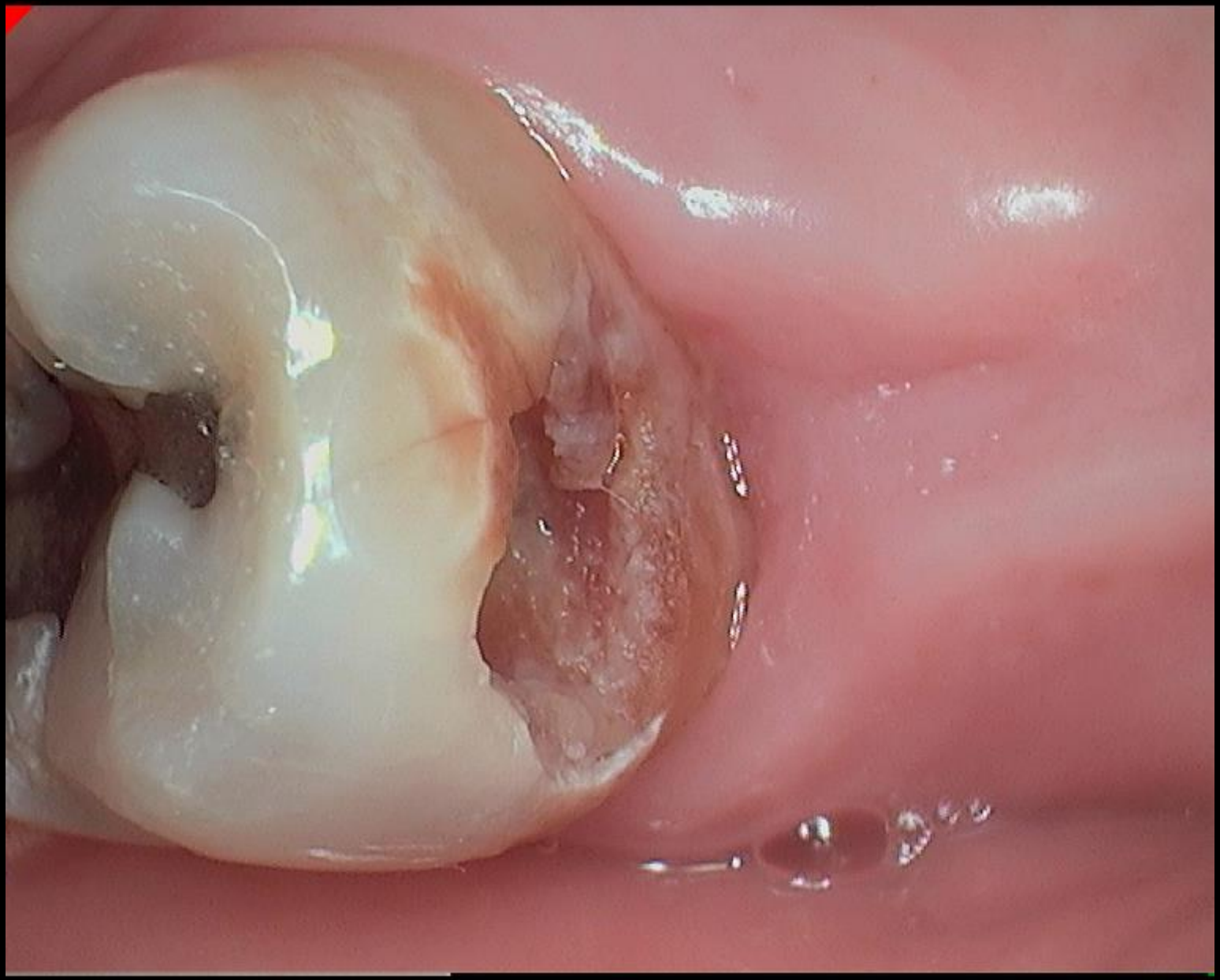

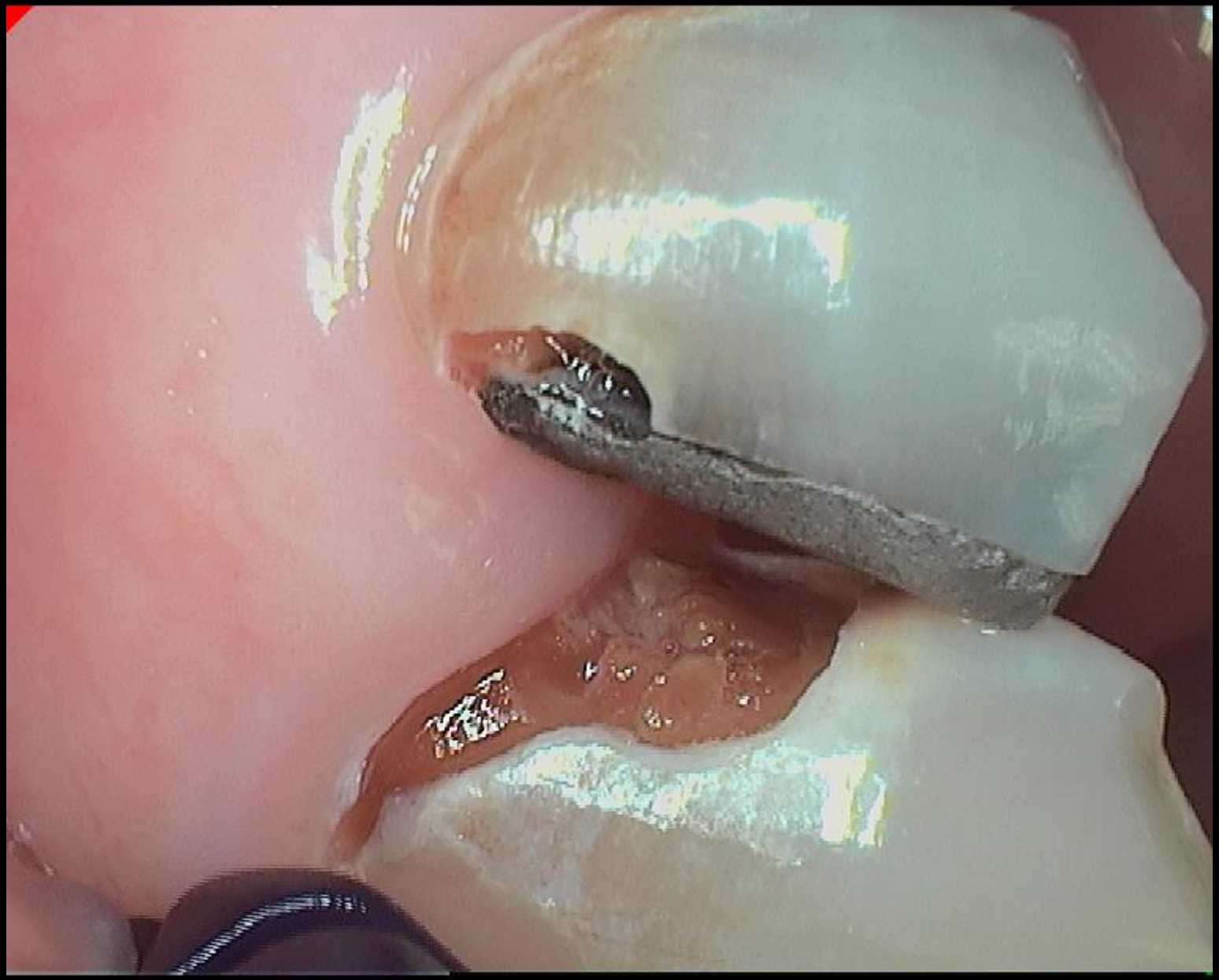

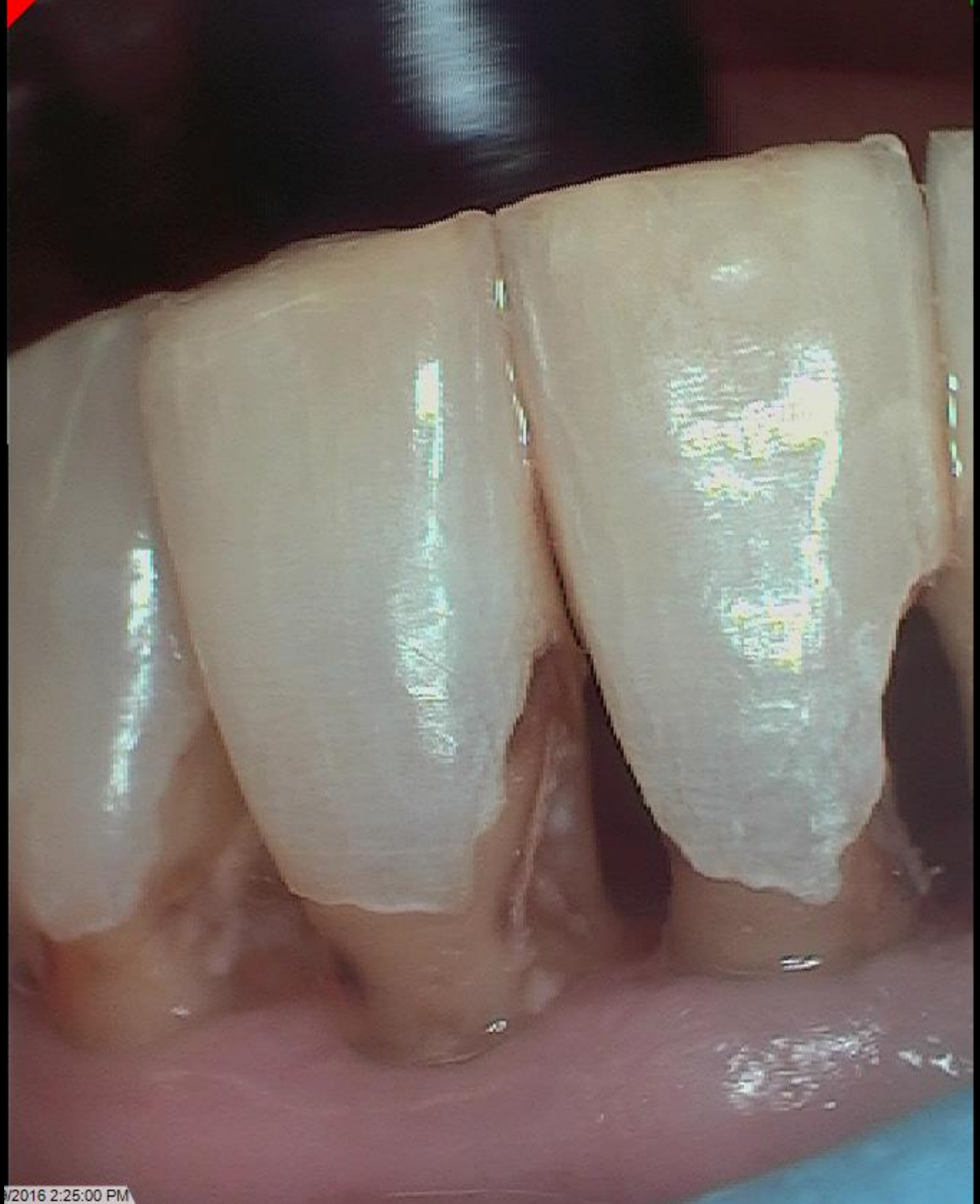
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PROBLEM LIST

- Multiple edentulous sites
- Recurrent/gross/rampant caries
- Poor OH and habits
- Patient is reluctant on Full mouth EXTs and Complete Dentures
- “Magically” Stayplate fitted adequately
- Zero money (Denti-Cal)

TREATMENT OPTIONS

OPTION	RISK	BENEFIT	COST	TIME
No Treatment	Infections, pain, no more stayplate	Get to keep his teeth longer	$0	N/A
Full Mouth EXTs + CD/CD	-No more natural teeth. -Retention, stability, support and integrity of CDs -Period of time totally edentulous while healing	OHI becomes a lesser problem, better esthetics	$0 (for Denti-Cal)	Aprox. 3 months

OPTION	RISK	BENEFIT	COST	TIME
Full Mouth EXTs + Immediate CD/CD + Hard Relines	-No more natural teeth. -Retention, stability, support and integrity of CDs after bone remodelation -Extra apt for relines	OHI becomes a lesser problem, better esthetics	$0 (Depending on time for Hard Relines)	2 weeks

After explaining all the RBCA to the patient, and understanding all his problems he decided in choosing option 1: No Treatment

FIN

Wait a minute!

ALTERNATIVE OPTION

WHAT IS SDF?

- Silver diamine fluoride (SDF) is a colorless topical medicament comprising 25% to 29% (w/v) silver and 5% to 6% fluoride
- Recently approved by the FDA, (available as Advantage Arrest by Elevate Oral Care), as an agent useful for the reduction of dentin hypersensitivity, but it has also been shown to reduce bacteria and matrix metalloproteinases (MMPs). These are responsible for the degradation of dentin, and so it is believed to arrest carious lesions
- Therefore, in addition to using it to treat dentin hypersensitivity, dentists are using it off-label to arrest carious lesions and as a diagnostic indicator
- Silver diamine fluoride will only stain defects in the tooth structure, such as caries lesions and restorative margins; sound tooth structure will not be stained by silver diamine fluoride

HOW DOES IT WORK?

SDF has a dual mechanism of action resulting from the combination of its ingredients:

- **The silver component acts as an anti-microbial agent, which kills bacteria and prevents the formation of new biofilm. It remains active well after application**

- **The fluoride promotes remineralization and acts to prevent further demineralization of tooth structure**

- **The ammonia stabilizes high concentrations in solution**

INDICATIONS

- **Extreme caries risk (Xerostomia or Severe Early Childhood Caries)**
- **Treatment challenged by behavioral or medical management.**
- **Patients with carious lesions that may not all be treated in one visit.**
- **Difficult to treat dental carious lesions.**
- **Patients without access to dental care.**

Horst JA, Ellenikiotis H, UCSF Silver Caries Arrest Committee, Milgrom PM. UCSF Protocol for Caries Arrest Using Silver Diamine Fluoride: Rationale, Indications, and Consent. *Journal of the California Dental Association*. 2016;44(1):16-28.

CONTRAINDICATIONS

- **Allergy to Silver**

RELATIVE CONTRAINDICATIONS

- **Significant desquamative gingivitis or mucositis**

Horst JA, Ellenikiotis H, UCSF Silver Caries Arrest Committee, Milgrom PM. UCSF Protocol for Caries Arrest Using Silver Diamine Fluoride: Rationale, Indications, and Consent. *Journal of the California Dental Association*. 2016;44(1):16-28.

UCSF DENTAL CENTER INFORMED CONSENT FOR SILVER DIAMINE FLUORIDE

Facts for Consideration:

- Silver Diamine Fluoride (SDF) is an antibiotic liquid. We use SDF on cavities to help stop tooth decay. We also use it to treat tooth sensitivity. SDF application every 6-12 months is necessary
- The procedure: 1) Dry the affected area, 2) Place a small amount of SDF on the affected area, 3) Allow SDF to dry for one minute, 4) Rinse.
- **Treatment with SDF does not eliminate the need for dental fillings or crowns to repair function or esthetics. Additional procedures will incur a separate fee.**
- I should not be treated with SDF if: 1) I am **allergic to silver**, or 2) there are painful sores or raw areas on my gums (i.e., ulcerative gingivitis) or anywhere in my mouth (i.e., stomatitis).

Before Post-Treatment Final Result

Benefits of Receiving SDF:

- SDF can help stop tooth decay.
- SDF can help relieve sensitivity.

Risks Related to SDF include, but are not limited to:

- **The affected area will stain black permanently.** Healthy tooth structure will not stain. Stained tooth structure can be replaced with a filling or a crown.
- Tooth-colored fillings and crowns may discolor if SDF is applied to them. Color changes on the surface can normally be polished off. The edge between a tooth and filling may keep the color.
- If accidentally applied to the skin or gums, a brown or white stain may appear that causes no harm, cannot be washed off, and will disappear in 1-3 weeks.
- You may notice a metallic taste. This will go away rapidly.
- If tooth decay is not arrested, the decay will progress. In that case the tooth will require further treatment, such repeat SDF, a filling or crown, root canal treatment, or extraction.
- These side effects may not include all of the possible situations reported by the manufacturer. If you notice other effects, please contact your dental provider.
- Every reasonable effort will be made to ensure the success of SDF treatment. There is a risk that the procedure will not stop the decay and no guarantee of success is granted or implied.

Alternatives to SDF, not limited to the following:

- No treatment, which may lead to continued deterioration of tooth structures and cosmetic appearance. Symptoms may increase in severity.
- Depending on the location and extent of the tooth decay, alternative treatment may include placement of fluoride varnish, a filling or crown, extraction, or referral for advanced treatment modalities.

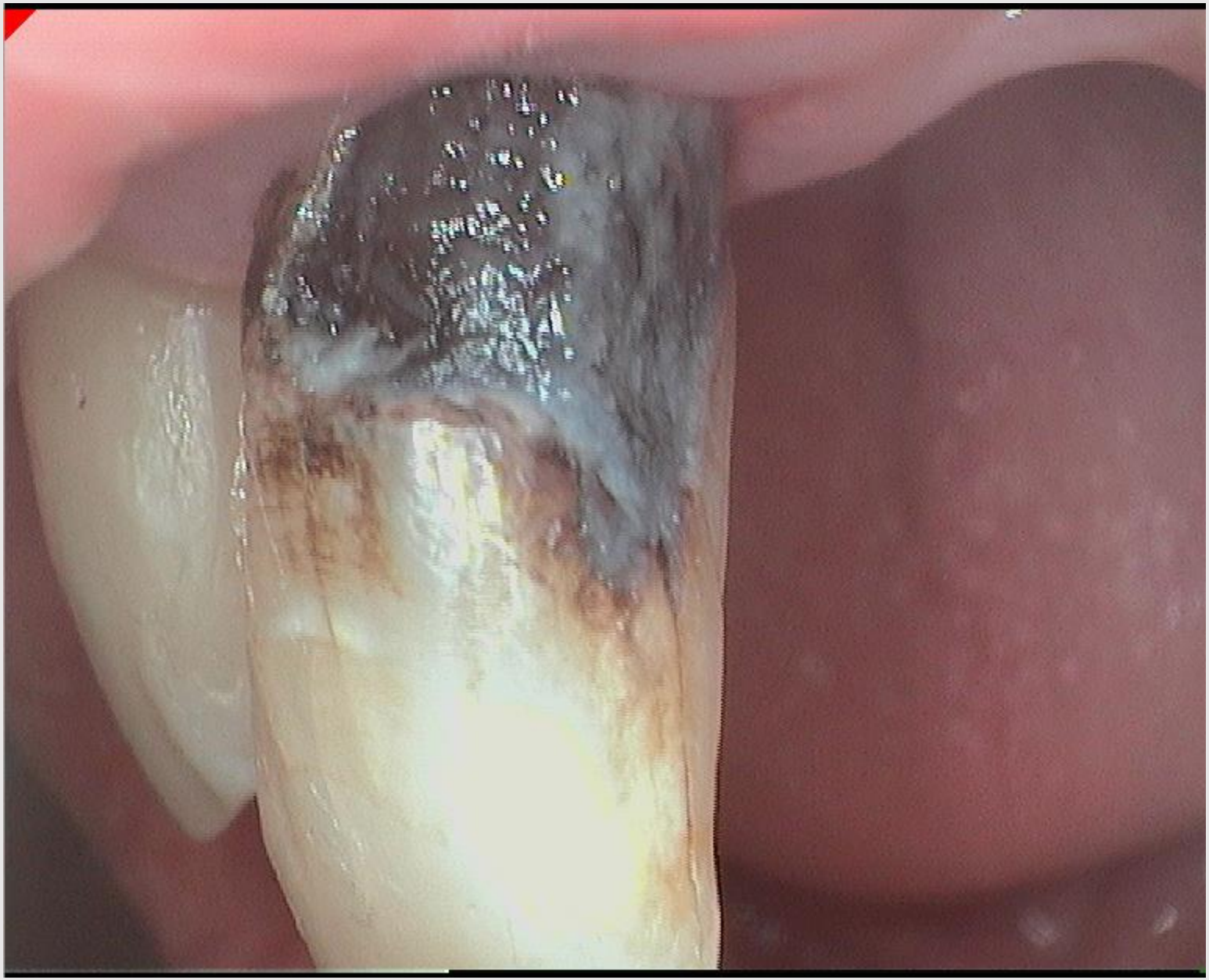
I CERTIFY THAT I HAVE READ AND FULLY UNDERSTAND THIS DOCUMENT, AND ALL MY QUESTIONS WERE ANSWERED:

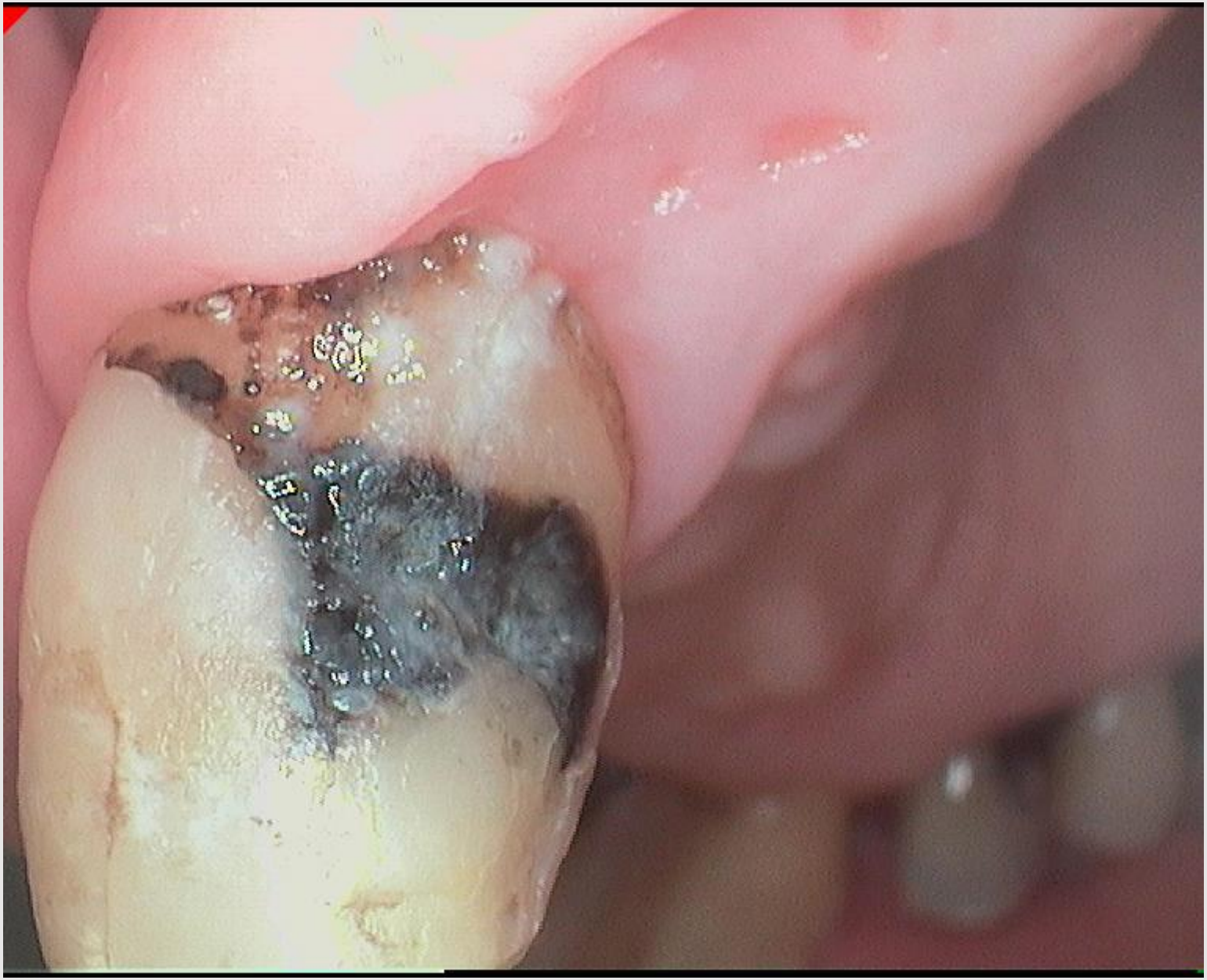
_____ (signature of patient) 05/13/2017 (date)

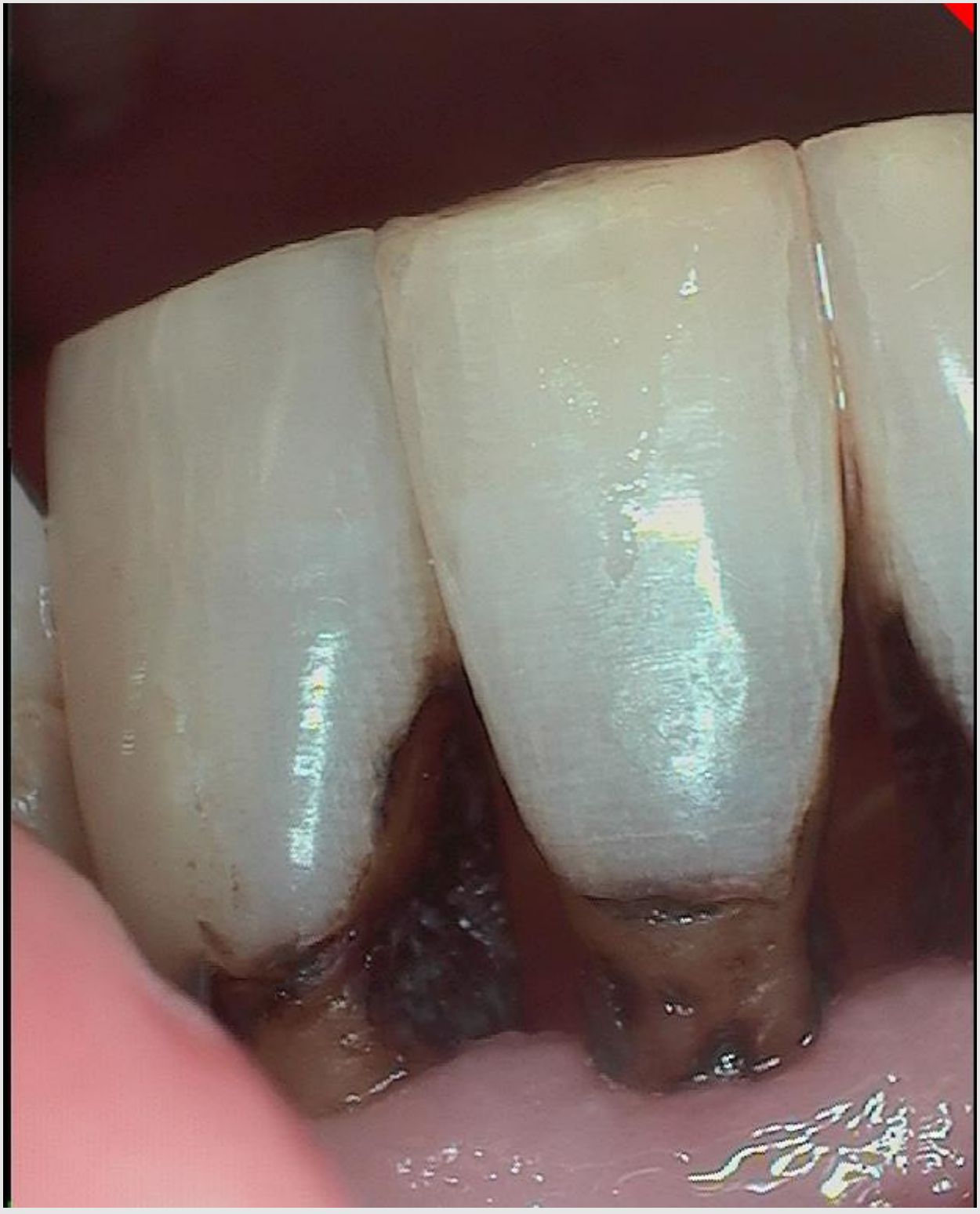
_____ (signature of witness) 05/13/2017 (date)

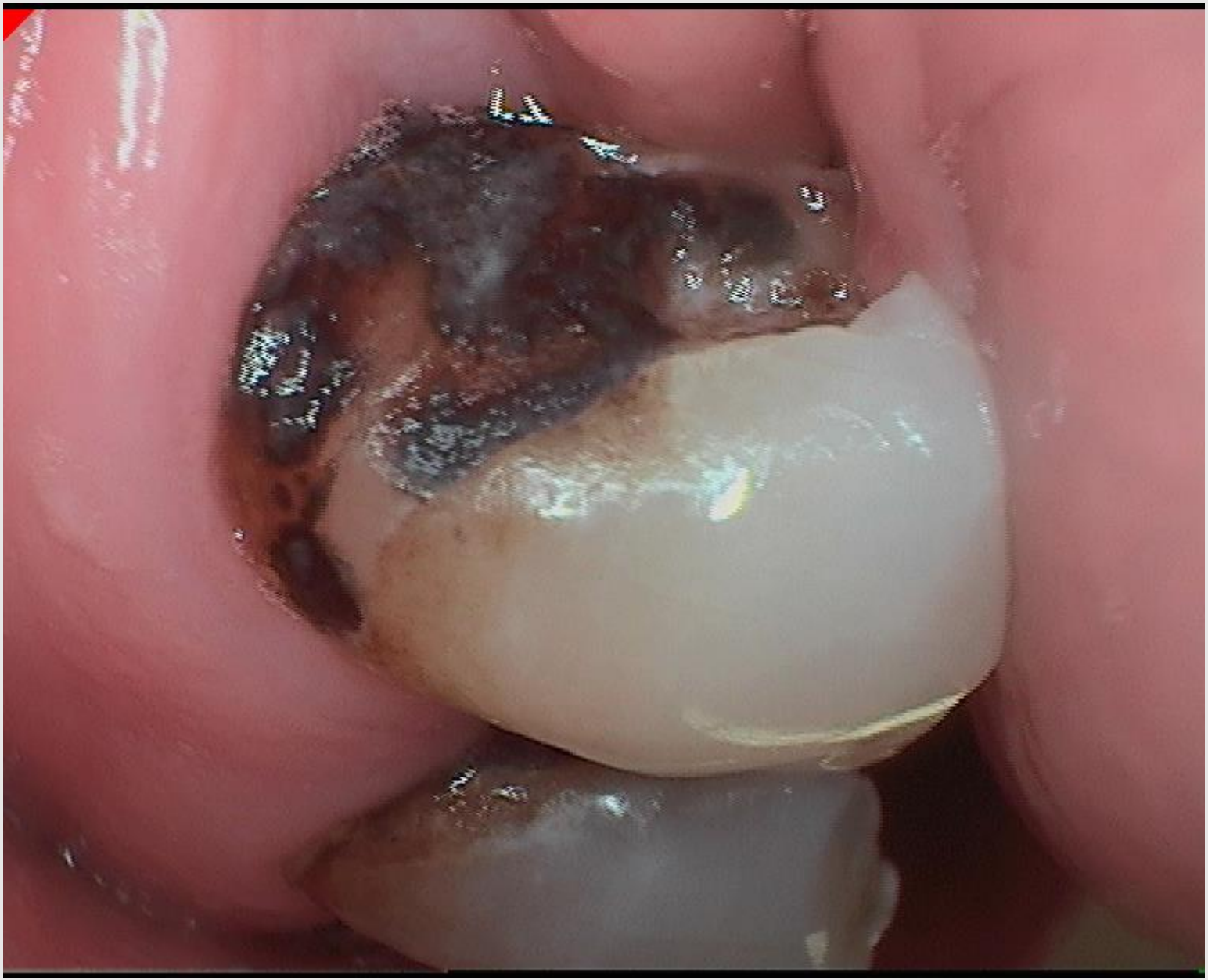
STEPS

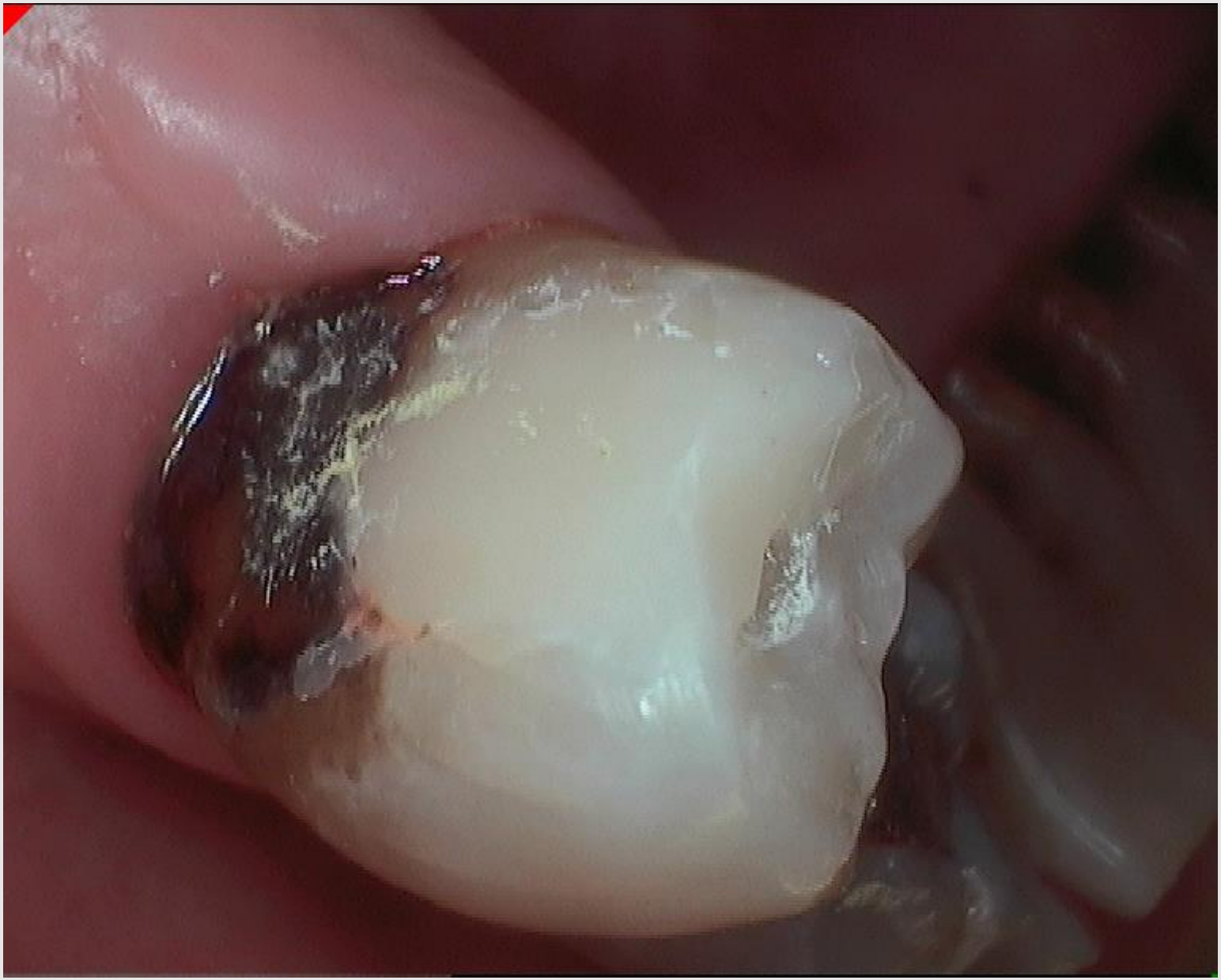
- Protect soft tissue areas with Vaseline.
- Informed patient possible metallic aftertaste and temporary sensitivity.
- 1 drop of SDF enough for approximately 5 applications
- Applied in all Carious lesions.
- Second time application might be needed after 1 week.

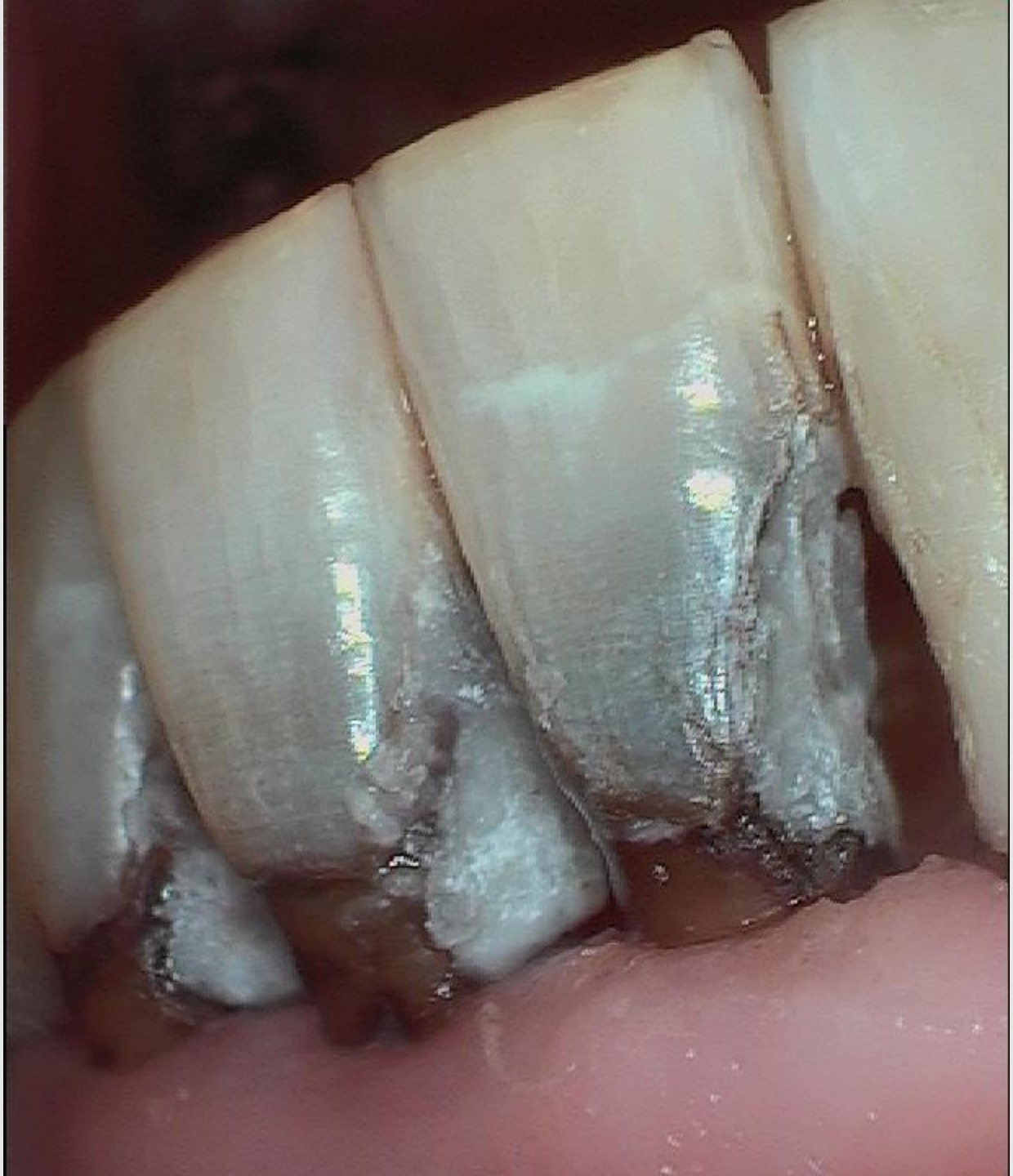












LIMITATIONS AND OUTCOME

- Lack of tooth structure to withstand mastication forces.
- SDF has poor penetration in subgingival caries.
- Even though there were significant improvements after the application, some lesions had better response to SDF than others.
- Unfortunately tooth #4 and #31 was too far gone and was not amenable to successful Tx with SDF. In hindsight SDF, if applied earlier, would have yielded better success.
- Patient will still eventually need Full mouth EXTs and CDs. SDF treatment simply help delayed the deteriorating process in his case and the patient is fully aware of that.

End
of
presentation

THANK YOU