Restoring a Patient with Dental Fear

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Patient Information

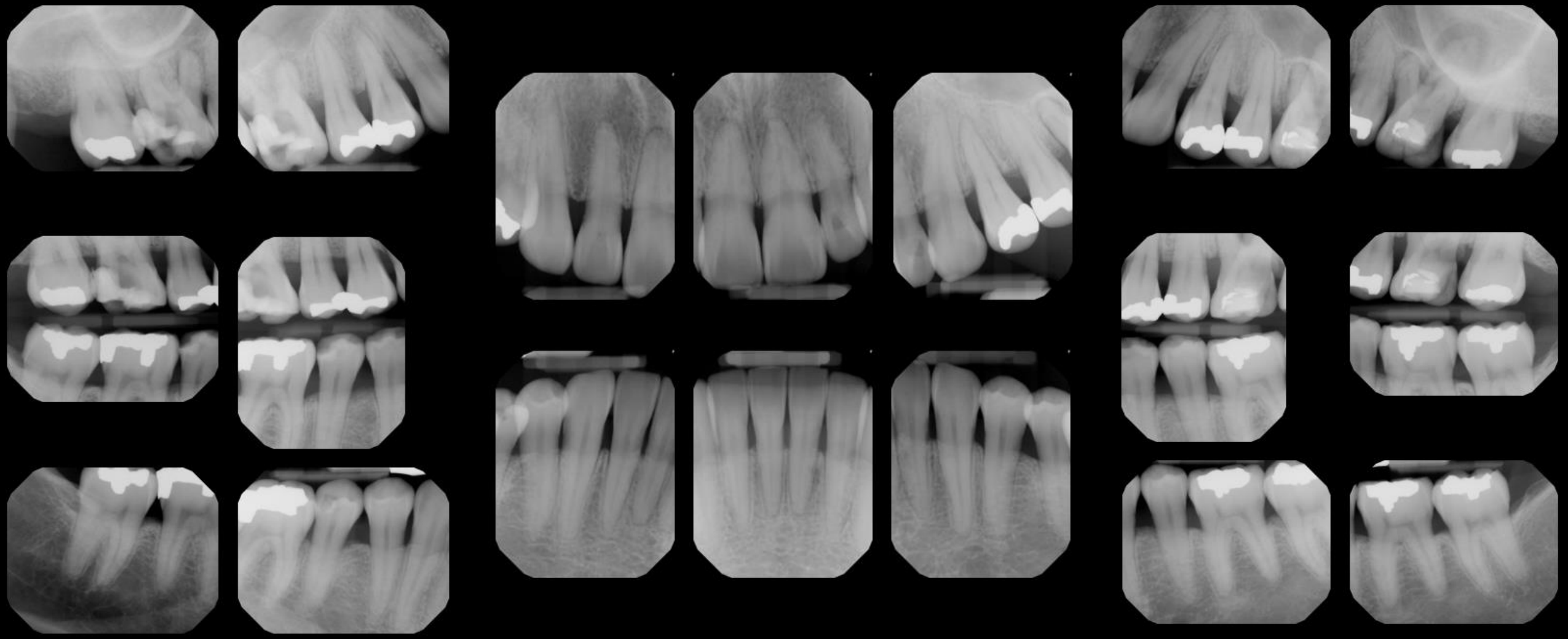
- 36-year-old female
- CC:
  - My filling fell out and my teeth hurt when I eat.
- Medications:
  - Birth control
- Allergies:
  - Pollen
- Significant dental fear, especially of "drill"
- Esthetically driven
- New Patient to the school
- SH: Has two kids with bad allergies. Concerned about cleanliness of clinic.

- Photo redacted for patient privacy

DENTAL HISTORY

- Previously a patient in Pedo / Ortho (braces removed 20 years ago). Currently uses Essix retainer nightly to maintain tooth positioning.
- Has had intermittent dental care over the last 20 years
- Moderately restored with fillings on most molars and premolars – mostly amalgams.
- Presented to screening clinic with pain in UL when biting which had been occurring for several months.
  - Failed first screening appointment due to dental fear.
  - Fear rated 10/10.
- Interested in Invisalign to correct diastema / rotation of #10

FMX



PERIODONTAL CHART – MAXILLARY

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PERIODONTAL CHART – MANDIBULAR

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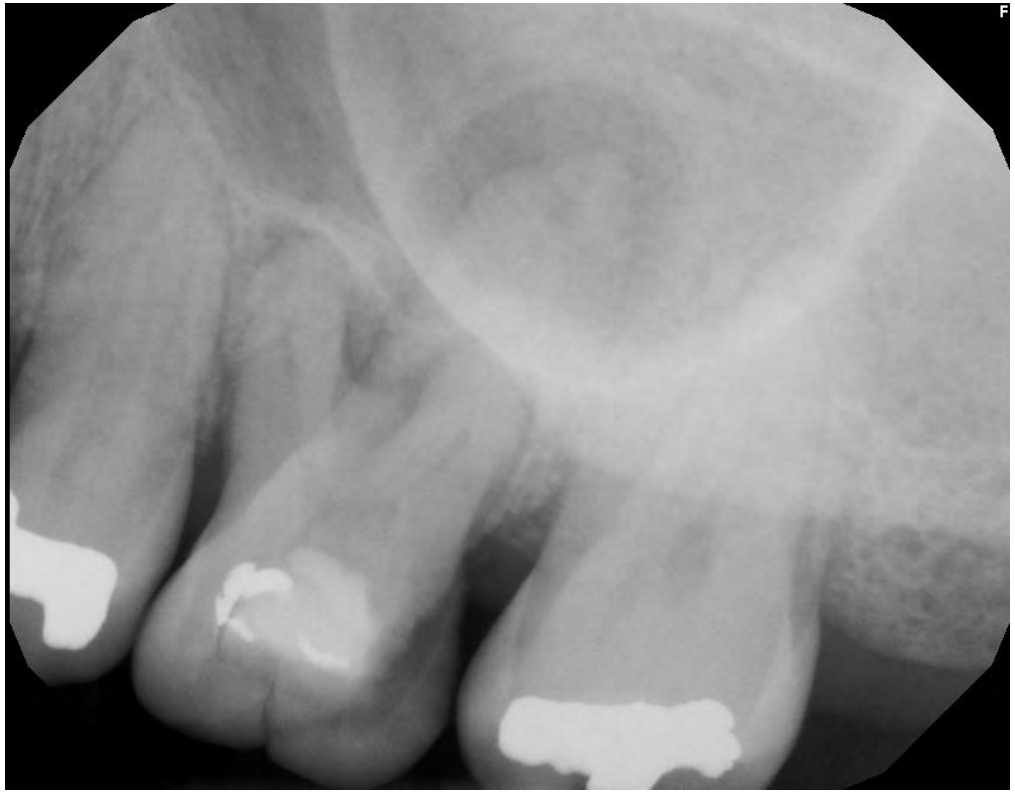
PERIODONTAL FINDINGS

- Pocket depths: 1 – 8
- Plaque index: 0.3 (Excellent)
- Localized BOP posterior maxilla
- Generalized slight mobility, but Class III mobility on coronal fragment of #14
- Furcation involvement: #3, #14
- Patient reported brushing 2-3x/day, flossing 1x/day, and using Listerine 3x/week
- Generalized slight recession on facials
- Periodontal diagnosis:
  - Generalized mild-to-moderate chronic periodontitis with localized moderate-to-severe chronic periodontitis #13/14 due to fracture #14
  - Stage II, Grade B (except UL)
  - Mucogingival involvement #5, 12

DENTAL FINDINGS – PROBLEMS LIST

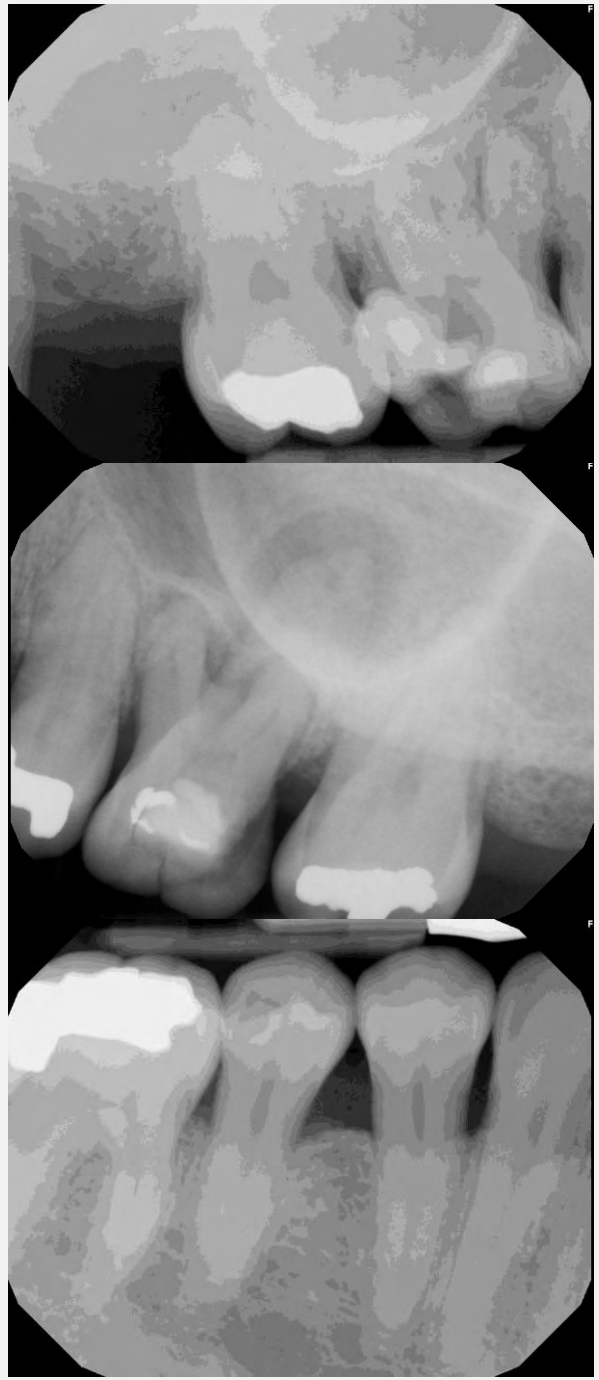
- 2 – Oa with void on occlusal surface but no marginal discrepancies
- 3 – ICDAS 5, partially missing DOc with recurrent decay, pulp chamber not visible clinically
- 4 – DMR fracture, D1 distal, F abfraction, MOa
- 5 – DOa sound, F abfraction
- 7, 8 – PDL widening
- 10 – Lc sound, tooth rotated, diastema present between 9/10, slightly smaller than contralateral
- 12 – F abfraction
- 13 - F abfraction, brown spot lesion on distal - hard
- 14 – ICDAS 5, fractured amalgam with parulides present on both buccal and palatal tissue, buccolingual fracture, nonrestorable.
- 15 – Oa sound, D1 mesial
- 18 – E2 mesial, OBa sound
- 19 – E2 distal, OBa sound
- 20, 21, 28 – F abfraction
- 29 – DOc fractured, ICDAS 3 in mesial pit.



OBJECTIVE TESTING

	#3	#14	#29
Cold	-	Not tested	+
EPT	-	Not tested	WNL
Palpation	WNL	+++	WNL
Percussion	WNL	++	WNL
Pulpal Dx	**Necrosis**	**Necrosis**	**Reversible Pulpitis**
Periapical Dx	**AAP**	**CAA**	**Normal**

- Controls tested but not listed



CARIES RISK ASSESSMENT

- Caries risk: High
  - ATP reading: 766
  - Resting saliva pH: 7 or above
  - Adequate saliva flow with normal consistency
  - Large carious lesions #3, #14 and smaller lesions present.

TREATMENT PLAN

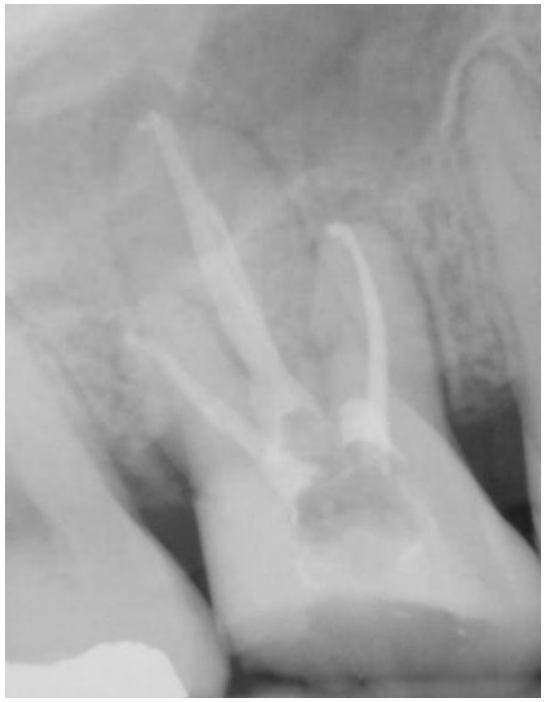
- Urgent Care
  - Ext: #14
- Disease Control
  - OHI, CAMBRA products (high fluoride toothpaste, rinses)
  - Limited SRP UR / Prophy elsewhere
  - ITE
  - Temporary GI filling #3 to cover hole
  - #15 M
  - #29 DO
  - #4 MOD
  - #3 RCT
  - #3 Buildup
- Reconstructive Phase
  - #3 Zirconia crown
    - May require crown lengthening for distal margin
  - Invisalign to close diastema #9-10
  - Implant consultation
  - #14 Implant
  - #5F, #12F possible free gingival graft if pt. desires esthetic result
- Maintenance
  - 4 month recalls, SPTs, OHI
  - Invisalign retainer

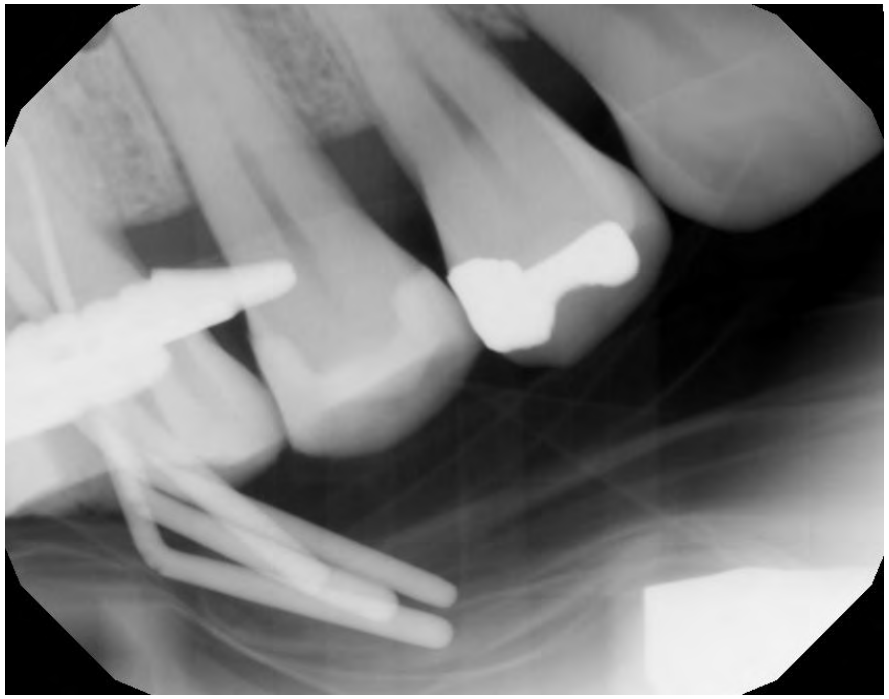
ALTERNATIVES TO TREATMENT PLAN

- Urgent Care
  - Ext: #14
- Disease Control
  - OHI, CAMBRA products
  - **Ext: #3**
  - Limited SRP UR / Prophy elsewhere
  - ITE
  - #15 M
  - #29 DO
  - #4 MOD
- Reconstructive Phase
  - **Composite veneer #10**
  - Implant consultation
  - **#3, #14 Implant**
  - #5F, #12F possible free gingival graft if desired
- Maintenance
  - 4 month recalls, SPTs, OHI

ALTERNATIVES TO TREATMENT PLAN

- Urgent Care
  - Ext: #14
- Disease Control
  - OHI, CAMBRA products
  - **Ext: #3**
  - Limited SRP UR / Prophy elsewhere
  - ITE
  - #15 M
  - #29 DO
  - #4 MOD
- Reconstructive Phase
  - **#2-4, #13-15 bridges**
  - **#10 Emax**
  - #5F, #12F possible free gingival graft if desired
- Maintenance
  - 4 month recalls, SPTs, OHI





COMPLETED #3 RCT AND #4MOD

Completed: Ext: #14, OHI, CAMBRA products, Limited SRP UR / Prophy elsewhere, ITE, #15 M, #29 DO, #4 MOD, #3 buildup and RCT

DISCUSSION – ANTIBIOTICS

- Do antibiotics interact with this patient's birth control?
  - A systematic review found that rifampin increased ovulation frequency, and reduced systemic exposure to estrogen and progesterone (oral contraceptives) by 30-83% (Simmons et al.)
  - Another systematic review and a retrospective study found that concurrent oral contraceptive and antibiotic use (tetracyclines, penicillins, cephalosporins, macrolides, and sulfonamides) resulted in pregnancy rates that were not statistically different from the "real" failure rate of oral contraceptives of 1-3%. However, rifampin does increase the likelihood of pregnancy (Dickenson et al., Helms et al.)
- Are antibiotics necessary in patients with CAA?
  - The majority of CAA do not require systemic antibiotic therapy for resolution and healing. Our patient's infection is draining through the mucosa and will likely not cause additional problems if the tooth is removed soon (AAE Colleagues for Excellence Winter 2012). The tooth was extracted one day after the initial examination.
- Do antibiotics promote healing of endodontic lesions?
  - A recent prospective cohort study shows no association between the use of long-term antibiotic and nonsurgical endodontic treatment (Ng et al.)

DISCUSSION – LINERS

- Does using cavity liners under class I or class II resin fillings improve the dentin thickness, sensitivity, and survival of deep restorations?
  - A Cochrane Systematic Review showed benefits were shown with cavity liners at 24 hours post-operatively based on patient responses
    - 5.6% sensitivity after a Class I/II posterior composite with liners vs 10% without liners
  - No benefits were shown at any other time point
  - Da Rosa et al., (systematic review) showed no difference in dentin hardening, lessened contamination, and dentin re-organization with or without the calcium hydroxide liner 3-4 months after treatment in permanent teeth
  - Opdam et al., (systematic review) showed a slight increase in annual failure rates for Class I/II posterior composites that had liners placed.
- Conclusions: We are taught that these liners seal dentinal tubules close to the pulp, but they have not been shown to reduce post-operative sensitivity or increase dentin thickness with any statistical significance (except 24 hours with self-reported low quality evidence). It may not be necessary to place the due to time, effort and expense.

DISCUSSION – DENTAL FEAR

- Fears
  - Due to lack of control
  - Previous bad experiences
- Signs of Fear
  - Missed appointments
  - Irregular care
  - Visible signs (sweating, crying, gripping chair)
  - "I hate the dentist," "Are we done?", "I don't get numb", "Will this hurt?", "Is it bad?"
  - Odd behavior (cleaning chair)

- Strategies
  - Ask if they are fearful
  - Communication skills
    - Nonverbal: Eye contact, smile, touch
    - Verbal: perform active listening, acknowledge feelings, use nonjudgmental reflection– show them that you care what they think
  - Disconfirm beliefs/expectations through appropriate techniques
    - Ask how they are doing frequently
    - Slow anesthesia technique
    - Positive reinforcement
  - Coping strategies (music, blanket, etc.)
  - Hypnosis and relaxation techniques

MANAGEMENT OF THE PATIENT'S DENTAL FEAR

- Fear of handpiece:
  - Except her urgent treatment (ext #14), I performed the simplest, least invasive procedures first and moved to progressively more challenging treatments, even though #3 had previously been painful
    - Prophy/limited SRP UR with Oraquix → No-drill GI patch over #3 (temporary) → 15 M with direct access → Other fillings → RCT #3
  - Reduced prep time with handpiece
- Fear of pain:
  - Slow anesthesia technique, with verification of patient's comfort and profound numbness
  - Explained exactly what we were doing each day and level of discomfort I expected, if any, making everything predictable for her.
- Additional accommodations:
  - Listened to her fears, acknowledged her feelings, and demonstrated empathy
  - Allowed her to stop me to take breaks, giving her a sense of control
  - Constant reassurance and positive reinforcement
  - The first few appointments with procedures were short (<1.5 hours), so the patient could adjust to dental school environment and I could gain her trust in meeting those deadlines.
  - Had her listen to music when using the handpiece.
  - Contacted her in the evening after all appointments to see how she was doing

GOOD RAPPORT IS THE BEST TREATMENT OF DENTAL FEAR

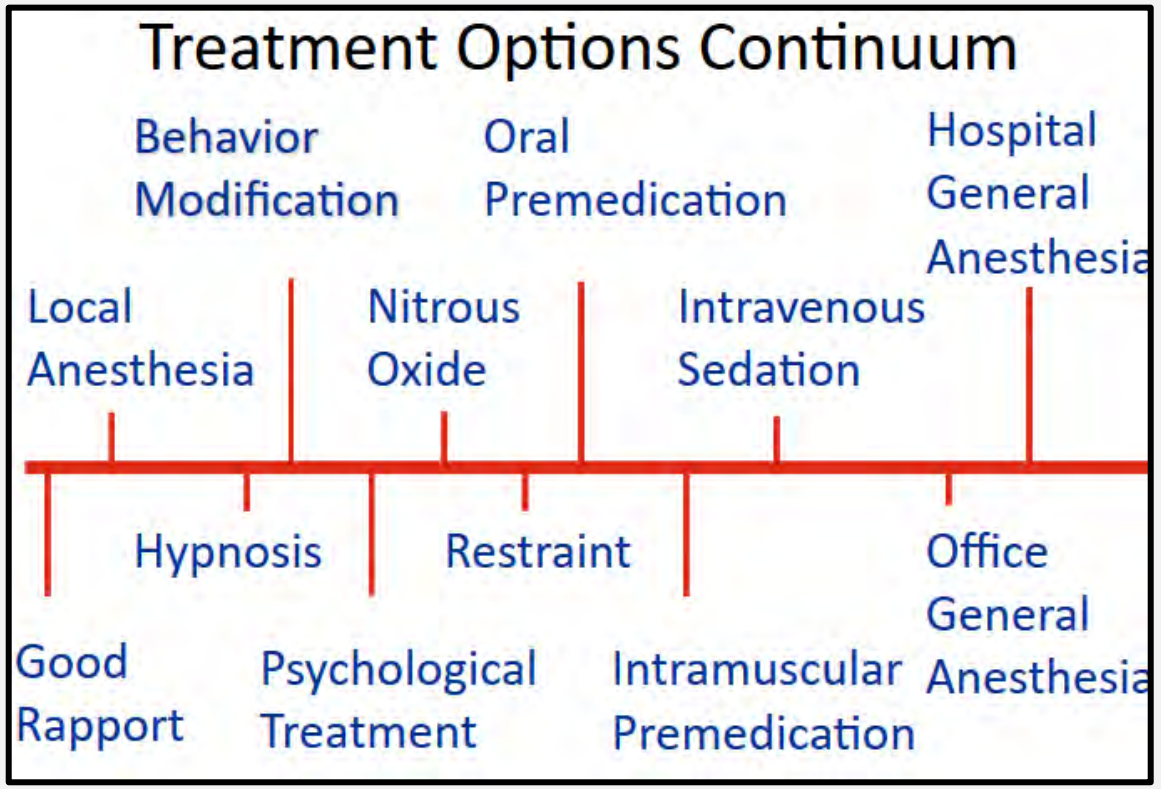


Photo from: Glassman, Paul and Rappoport, Alan. "Treatment of Fearful Dental Patients." Pacific Center for Special Care.

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