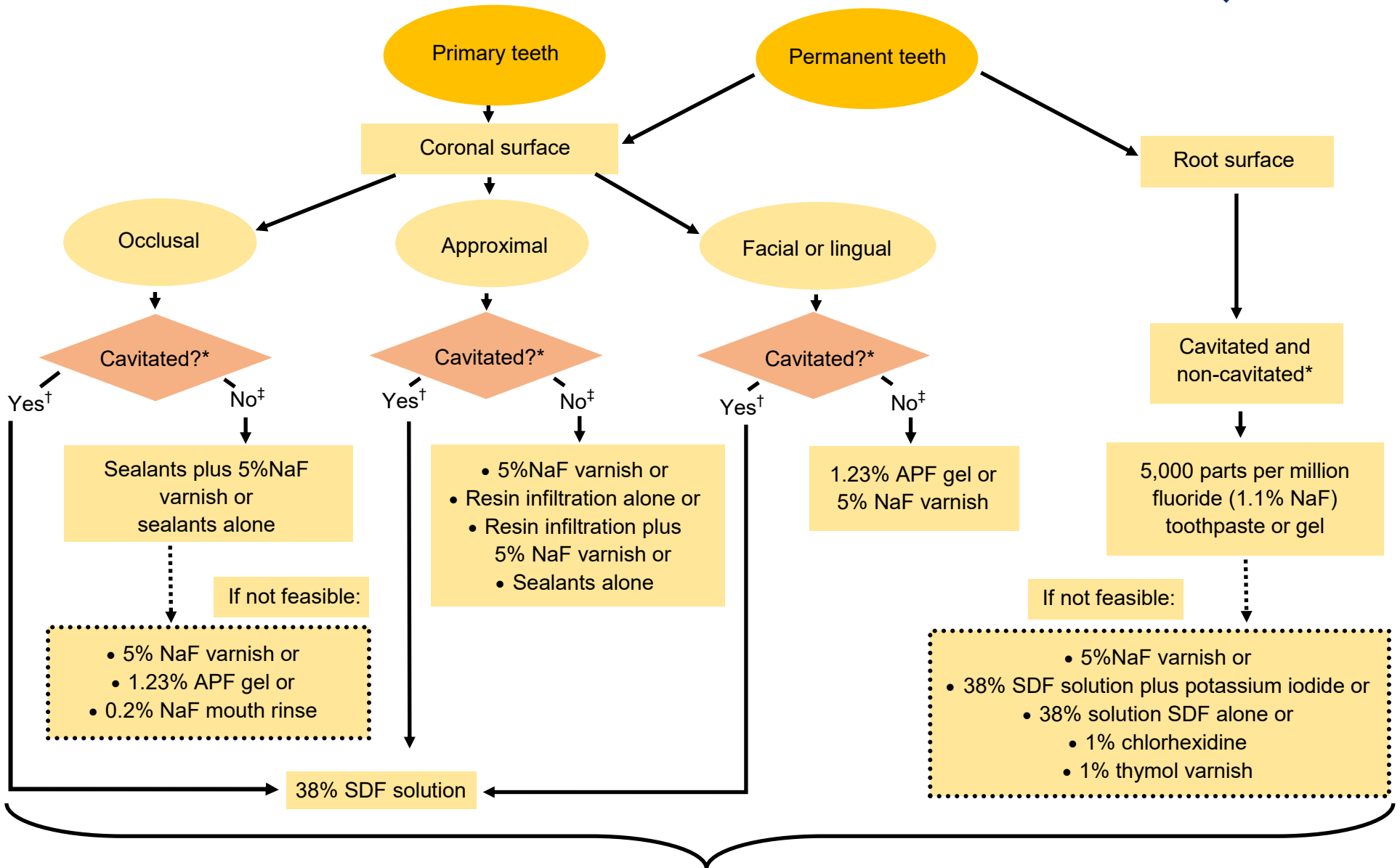


Evidence-based Guide to Sealing Over Decay















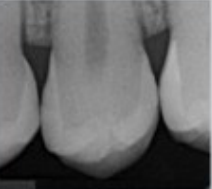

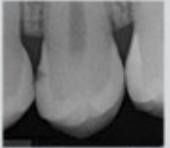


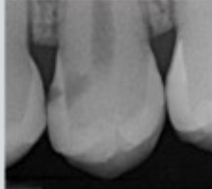


* Refer to Table 2
† Moderate->Advanced (orange and red)
‡ Sound->Initial (green and yellow)

Recall
Lesions should be monitored (for example, hardness or texture, color, radiographs) periodically throughout the course of treatment.

TABLE 2

American Dental Association Caries Classification System.

AMERICAN DENTAL ASSOCIATION CARIES CLASSIFICATION SYSTEM							
	Sound	Initial		Moderate	Advanced		
Clinical Presentation	No clinically detectable lesion. Dental hard tissue appears normal in color, translucency, and gloss.	Earliest clinically detectable lesion compatible with mild demineralization. Lesion limited to enamel or to shallow demineralization of cementum/dentin. Mildest forms are detectable only after drying. When established and active, lesions may be white or brown and enamel has lost its normal gloss.		Visible signs of enamel breakdown or signs the dentin is moderately demineralized.	Enamel is fully cavitated and dentin is exposed. Dentin lesion is deeply/severely demineralized.		
Other Labels	No surface change or adequately restored	Visually noncavitated		Established, early cavitated, shallow cavitation, microcavitation	Spread/disseminated, late cavitated, deep cavitation		
Infected Dentin	None	Unlikely		Possible	Present		
Appearance of Occlusal Surfaces (Pit and Fissure)*-†	ICDAS 0 	ICDAS 1 	ICDAS 2 	ICDAS 3 	ICDAS 4 	ICDAS 5 	ICDAS 6 
Accessible Smooth Surfaces, Including Cervical and Root‡							
Radiographic Presentation of the Approximal Surface§	 E0¶ or R0# No radiolucency	 E1¶ or RA1#	 E2¶ or RA2#	 D1¶ or RA3#	 D2¶ or RB4# Radiolucency extends into the middle one-third of the dentin	 D3¶ or RC5# Radiolucency extends into the inner one-third of the dentin	

* Photographs of extracted teeth illustrate examples of pit-and-fissure caries.

† The ICDAS notation system links the clinical visual appearance of occlusal caries lesions with the histologically determined degree of dentinal penetration using the evidence collated and published by the ICDAS Foundation over the last decade; ICDAS also has a menu of options, including 3 levels of caries lesion classification, radiographic scoring and an integrated, risk-based caries management system ICCMS. (Pitts NB, Ekstrand KR. International Caries Detection and Assessment System [ICDAS] and its International Caries Classification and Management System [ICCMS]: Methods for staging of the caries process and enabling dentists to manage caries. *Community Dent Oral Epidemiol* 2013;41[1]:e41-e52. Pitts NB, Ismail AI, Martignon S, Ekstrand K, Douglas GAV, Longbottom C. ICCMS Guide for Practitioners and Educators. Available at: https://www.icdas.org/uploads/ICCMS-Guide_Full_Guide_US.pdf. Accessed April 13, 2015.)

‡ "Cervical and root" includes any smooth surface lesion above or below the anatomical crown that is accessible through direct visual/tactile examination.

§ Simulated radiographic images.

¶ E0-E2, D1-D3 notation system.³³

R0, RA1-RA3, RB4, and RC5-RC6 ICCMS radiographic scoring system (RC6 = into pulp). (Pitts NB, Ismail AI, Martignon S, Ekstrand K, Douglas GAV, Longbottom C. ICCMS Guide for Practitioners and Educators. Available at: https://www.icdas.org/uploads/ICCMS-Guide_Full_Guide_US.pdf. Accessed April 13, 2015.)

Complimentary Patient Self-Management Skills & Concepts

Motivational Interviewing

Motivational interviewing (MI) is a collaborative conversation style that creates an open, non-judgmental environment to explore change. By attending to how we listen and respond during visits, we can form partnerships with patients and families and support health behavior changes. Like rowing a boat, when using MI don't forget your OARS!

- **O**pen-Ended Questions - ask questions that elicit an open response, not a "yes" or "no" answer
- **A**ffirmations - acknowledge and affirm positive change behaviors
- **R**eflections - reflect back what you have heard to show understanding
- **S**ummarizations - summarize what you have discussed and ask for confirmation

The SHARE Approach - 5 Essential Steps of Shared Decision Making

A successful visit requires shared decision making. Use the SHARE approach to bring your patient into the decision making process and work together to create a plan that you both agree to and feel good about.

1. **Seek** your patient's participation
2. **Help** your patient explore and compare treatment options
3. **Assess** your patient's values and preferences
4. **Reach** a decision with your patient
5. **Evaluate** your patient's decision

Evidence-based Preventive Materials & Tools

Sealants

- Glass Ionomer (high and low viscosity)
e.g. [GC Fuji Automix LC](#), [GC Fuji IX GP](#), [GC Fuji Triage](#)
- Resin
e.g. [Embrace WetBond Pit & Fissure Sealant](#)
- Silver Diamine Fluoride (SDF)
e.g. [Advantage Arrest SDF 38%](#)

Tools

- Curing Lights
[ADA Dental Product Guide](#)

References and Caries Risk Assessment Forms

References

- [Evidence-based clinical practice guideline for the use of pit-and-fissure sealants : JADA 2016;147\(8\):672-682](#)
- [The American Dental Association Caries Classification System for Clinical Practice](#)

CRA Forms

- [American Academy of Pediatric Dentistry, Caries-Risk Assessment and Management](#)
- [American Dental Association \(ADA\)](#)
- [CAMBRA: Caries Management by Risk Assessment](#)
- [California Department of Health Care Services - Domain #2](#)