Northern California Dental Society

rda4u

MODULE 2 – WEEK 3 – PART B

Composite Restorations

1. Composite is a _____ _____ a number of components.
2. Resin is a _____ organic substance like sap that can be hardened.
3. Three primary uses for composite resins include:
    a. _____ restorations
    b. _____ build-ups
    c. Closing _____
4. Dental work done for strictly ESTHETIC purposes are usually _____covered by insurance.

VIDEO 1

REMINDER: When watching these types of videos, I recommend that you watch them in **THREE STEPS**:

1) **Just watch – no notes**! Don't try to find the answers on this worksheet. Watch it to try and understand the concepts.
2) Try to **fill in the blanks** from your understanding of the material. Don't worry if you get them wrong!!
3) Watch the video again and **listen for the answers** to the questions on this worksheet.

5. He stated that the purpose of acid etch is to:
    a. Clean off _____ _____
    b. Remove the SMEAR layer of _____ (remind me to explain this better in class)
6. After rinsing off the etch, he stated to _____ dry the tooth and leave it a little _____ so that the collagen fibrils do not collapse. (let's talk about this in class!)
7. The two steps he did after placing the prime/bond is to:
    a. Gently _____ _____
    b. _____ _____
8. He placed the composite in _____ (we will talk about **why** he did that later!)
9. List at least three instruments or burs he used to trim the composite:
    a. _____
    b. _____
    c. _____
10. Excess composite outside of the restoration MARGINS is called _____.
11. Why did he use three different rubber polishing points? _____.

VIDEO 2

12. Remind me to talk to you about the following terms he used:
    a. Proximal box
    b. Pulpal floor
    c. Axial walls
13. What do you think is the purpose of placing retention grooves or points?

    _____

14. What type of matrix did he use? _____
15. Name the steps for placing the matrix in order:
    1) _____
    2) _____
    3) _____
16. Why did he burnish the band against the adjacent tooth? _____
17. Where did he place the composite FIRST? _____ _____
18. What did he recommend doing to help prevent the composite from sticking to the condensing instrument?

    _____

    (Notice that he placed the composite in 2mm increments and light-cured between each layer. You will find out later why this is important.)
19. What did he do immediately after removing the ring, matrix, and wedge and why?

    _____

20. What types of burs did he recommend to trim the excess composite on the occlusion?

    _____

21. He checked for _____ with an _____ and suggested removing it with a _____ bur or a _____-_____ hand instrument.
22. What did he use to contour the proximal surfaces and recreate the embrasures? _____
23. Do you think he did a good job? Why or why not. _____

    _____

VIDEO 3

24. What class restoration is he placing in this video? _____
25. What were the two benefits he stated for placing a wedge?
    a. _____ _____ _____
    b. _____ _____ _____
26. What does he use to place the prime/bond? _____ (It doesn't look like it's name!)
27. What type of instrument is he using to pack and shape the composite for this filling? _____

    _____

28. What type handpiece does the soft-flex disc attach to? _____
29. What did he suggest using to remove excess flash in the embrasure area? _____
30. What is used to smooth out the composite interproximally? _____
    (also called a finishing strip)
31. Using a sanding (finishing) strip should be _____ the contact point. Why do you think that is important? _____
    Wow – pretty nice looking restoration right?! Can you think of one thing that he didn't discuss, that is VITAL to the esthetic appearance of the composite restoration?
    _____

BACK TO THE PODCAST ☺

32. Paste syringe composite material is _____whereas the liquid syringe is _____.
33. The most commonly used form of composite is in a _____.
34. _____ means to set up or harden.
35. Self-cure composites come in separate jars of _____and _____. It is typically only used for _____ _____ _____.
36. _____ composites require _____ cure times.
37. The two main ingredients in composite resin are:
    a. Organic _____ chemical name is Bisphenol-A glycidyl methacrylate or bis-GMA for short)
    b. Inorganic _____ such as silica, quartz, and glass
38. Silane coupling agent is an _____ that helps to stick the two main ingredients of a composite restoration together.
39. Large filler particles make the composite _____, but gives it a _____surface which will collect _____ and will not polish very well.
40. Resin with small filler particles is not very _____ but is highly polishable and resists _____.
41. Typically the best classification to us is a _____ which is a combination of _____ and _____filler particles.
42. The first generation of composite had _____filler particles (rocks ☺). When used, it is usually just for a _____build-up or for restorations only on _____ teeth.
43. Microfilled composites have less wear _____ (wears more) and is not as strong as macrofilled. There is more _____ and less _____ particles.
44. There is _____ shrinkage with microfilled composites.
45. Since microfilled composites are not very strong, they are not good for class ___, ____, _____ restorations but are good for class _____ and _____ restorations since they are highly polishable.
46. _____ composite is strong and polishable!

47. Flowable composite has low _____ and is most commonly used as a _____in large composite restorations.
48. The more resin in the composite (the less filler particles), the greater the _____.
49. _____people have allergic reactions to composite.
50. Composite wears _____than amalgam, especially with _____. (grinding the teeth)
51. Define the following terms:
    a. Attrition: _____
    b. Abrasion: _____
    c. Abfraction: _____
    d. Erosion: _____
    e. In deep cavity preps, it is recommended that we place the composite in _____ and cure between each one to minimize _____
52. Shrinkage of composite during the curing process causes a number of problems. List two:
    a. _____
    b. _____
53. The solution to the shrinkage during polymerization is to cure the composite in _____.
54. The greater the resin content of the composite the _____ the shrinkage.
55. Composite resins conducts hot and cold much greater than metals in the mouth. True False
56. Why do some composite fillings show up on x-rays and others don't? _____

    _____
57. Reasons for microleakage include:
    a. _____ (saliva, blood, and the smear layer oils)
    b. _____from handpieces
    c. Shrinkage of the composite resin during polymerization
    d. _____ and _____ due to temperature changes.
        i. Cold causes _____
        ii. Heat causes _____
58. Who can legally place the topical anesthetic in California? _____
59. Why do YOU need to know about anesthetizing when you can't anesthetize? _____

    _____
60. Why do we rinse and aspirate after anesthetic is delivered? _____ _____
61. Who can legally place a rubber dam in California? _____
62. We place a matrix where there is a missing _____.
63. Who can legally place a matrix in California? _____
64. What should the tooth look like after the acid etch has sat for 20-30 seconds and has been rinsed off and the tooth has been dried? _____

65. Why is it important to keep the acid etch contained and straight up the suction tip when rinsing?

_____

66. Whose responsibility is it to manage the steps to the bonding part of the composite restoration procedure? _____

67. Composite is often shaped with instruments that are _____ plated.

68. The back and forth after curing the composite is to check the _____ with _____ _____and check interproximally with floss for _____.

69. The most common rotary instrument to trim cured composite is a _____ bur on a _____ handpiece.

70. The shape of the bur chosen for trimming excess composite is determined by the _____ being trimmed.

71. The color stripe on the friction grip diamond burs indicates the _____ of the bur.

72. A _____ strip is used _____ to smooth the composite <u>under</u> the contact point.

73. Is sensitivity after a composite restoration normal? Yes No What would indicate if it is normal or if there might be a problem? _____

74. Why is it very beneficial that resin sticks to resin? _____

_____

75. We cannot use _____ with resin products as it inhibits the resin from _____ properly.

NOW . . . USE THE FOLLOWING PAGE TO PRACTICE PUTTING THE STEPS TO A COMPOSITE RESTORATION IN THE RIGHT ORDER. THIS SHOULD BE FUN AND WILL REALLY HELP YOU FOR THIS COMING WEEKEND IN THE OFFICE.

NEXT UP: TIME TO PRACTICE IN THE OFFICE!!!

INSTRUCTIONS: PRINT THIS PAGE AND CUT EACH OF THE 15 STEPS INTO SEPARATE STRIPS OF PAPER. MIX THEM UP, AND PUT THEM IN THE RIGHT ORDER. CHECK THE VIDEO FROM THE SLIDE THAT STATES THE RIGHT ORDER. DO IT AS MANY TIMES AS YOU NEED TO IN ORDER FOR THE STEPS TO BECOME EASY!

PREPARE PATIENT FOR THE PROCEDURE

DDS ANESTHETIZES – WAIT FOR ANESTHESIA EFFECT

PREP TOOTH

RINSE AND ASPIRATE AS NEEDED

PLACE ISOLATIONS

PLACE MATRICES

ACID ETCH

RINSE AND ASPIRATE

PLACE BONDING AGENT

PLACE COMPOSITE AND CONDENSE

LIGHT CURE

TRIM

CHECK BITE AND OVERHANG (TRIM AND RECHECK UNTIL CORRECT)

POLISH AND FINISH

RINSE AND ASPIRATE – HOMECARE INSTRUCTIONS