Recognizing Restorations and Charting Clinical Findings

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Areas of Dentistry

- **Operative Dentistry**: prevention, diagnosis and treatment of diseases, developmental defects and traumatic injuries of hard tissues of individual teeth
  - Performed by general dentists

- **Restorative Dentistry**: more global and includes operative dentistry as well as the replacement of lost teeth
  - Includes fixed partial dentures, removable partial denture and implants
  - Areas of Restorative Dentistry
    - Prosthodontics
    - Endodontics
Dental Materials

- “Fillings”
  - Amalgam
  - Composite

- “Crowns”
  - All metallic
  - Porcelain
  - Combination

- Implants
- Wires, screws, pins
- Endodontics
  - Root canal therapy
    - Gutta purcha
    - Silver points
  - Posts
- “Bridges”
Composites
Amalgams
Evaluate All Teeth: Decay, Recurrent Decay and Defects

• Broken restorations

• Evaluate margins
  – Change in tooth color
  – Open margins
    • space/crevice between tooth and restoration
  – Flash or Overhang
    • excess of material past margin
  – Under-contoured/submarginal
    • insufficient restorative material at margin
Which restoration looks like it has an open margin?
Which restoration has an overhang?
Surface Abbreviations

- B = buccal
- F = facial/labial
- L = lingual
- M = Mesial
- D = Distal
- O = Occlusal
- I = Incisal
- MO = mesio-occlusal
- DO = disto-occlusal
- OB = occlusobuccal
- DL = distolingual
- DOB = distoocclusalbuccal
- MIL = mesioincisolingual
- DILF = distoincisolingualfacial
Which surfaces does #14 restoration include?

1. DOB
2. MOL
3. DOL
4. MOB
Direct Restorations/Fillings

• Direct Fillings: placed at one appointment with no laboratory component

• Main Types
  – Amalgam
  – Composite
    • Preventive/conservative resin restorations
    • Sealants
  – Glass Ionomer
Amalgam (A): “Silver” Filling

• Composed of several metals:

• Class I: “O” first if extension to buccal or lingual
  • OA, OBA, OLA

• Class II: proximal surface first, then “O”, then B or L last
  – MOA, MOLA
  – Often prepared from occlusal

• Charting: solid blue in shape of filling
Amalgam Advantages

• Durable
• Economic
• Low technique sensitivity
• Broad applicability
• Easy
• Quick
• Sealant Capability
• Direct placement
Amalgam Disadvantages

• Marginal breakdown
• Non-aesthetic
• (Potential) Galvanic reaction
• Public perception
FOR AESTHETIC REASONS, I PREFER THE SILVER FILLINGS...
Name this filling.
Any other concerns?

1. MOA
2. OLA
3. OBA
4. OLC
Tooth Colored Restorations: Composite (C)

• Bonds to enamel and dentin
  – Acid etch = mechanical retention

• Class III and IV: Prepared from facial or lingual
  – Class III: Proximal surface recorded first
    • MLC, DFC, DLFC
  – Class IV: Incisal edge recorded second
    • MIC, MIFLC, DIFLC
Tooth Colored Restorations: Composite

- Class II: Prepared from occlusal
  - MOC, MODC, DOC

- Charting: blue outline in shape of filling
Variations of Composites

• Preventive Resin Restoration or Conservative Composite Restoration
  – Abbreviated PRR or CCR
  – Indicates a shallow restoration (conservative composite)
  – Charted with blue outline

• Sealants: composite or sealant material
  – Placed only within enamel
  – Does not require a drill
  – Charted with a blue S
Composite Advantages

- Aesthetic
- Economic
- Broad applicability
- Direct placement
- Sets on demand
- Low marginal leakage on enamel
- No galvanic response
- No mercury
Composite Disadvantages

- Polymerization shrinkage
- Durability
- High technique sensitivity
- Variable handling
- Time requirements
Other non-metallic fillings

• Glass Ionomer (GI): used as a liner, base or cervical (class V) lesions
  – Bonds to the tooth
  – Contains fluoride
  – Charted with blue outline and GI

• Temporary Filling
  – Often “IRM”/ZOE
  – Charted “temp”
Recognizing Fillings Radiographically

- **Amalgam**
  - Irregular
  - Radiopaque

- **Composite**
  - Defined outline
  - Radiolucent or radiopaque
Direct Restorations

• Existing Restorations: BLUE
  – Amalgam = solid blue
  – Tooth colored restorations= blue outline
    • Write GI or PRR if necessary
    • Sealant: no outline, just blue S

  – Temporary filling: outline and write “temp”
Charting Missing, Impacted and Retained

- Missing: color entire tooth blue

- Retained baby tooth: write tooth letter on tooth

- Impacted: blue outline (oval) around entire tooth