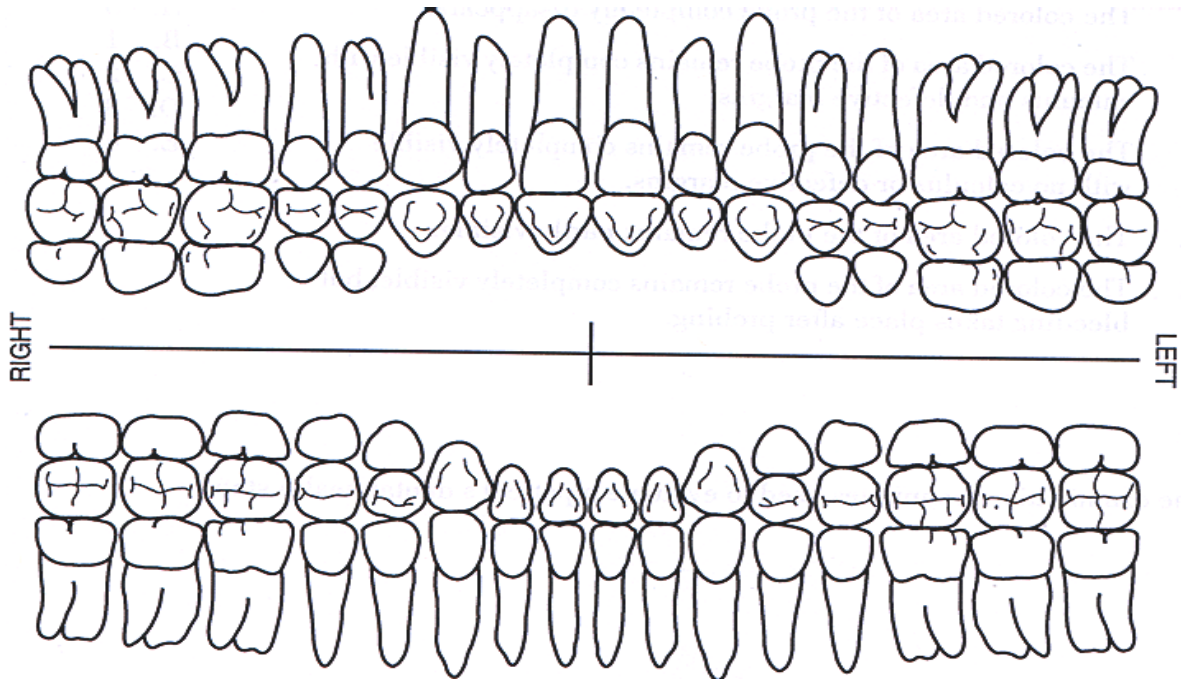


Dental Assistant Tray Set-Up And Procedural Steps Study Guide

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Practice Clinical Dental Charting

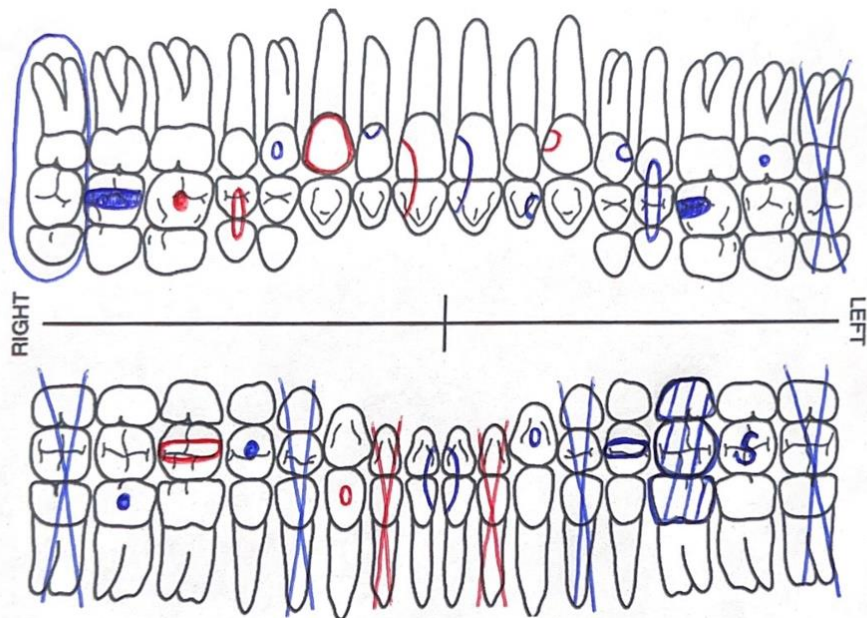


1. Number all of the teeth on the blank charting sheet above.

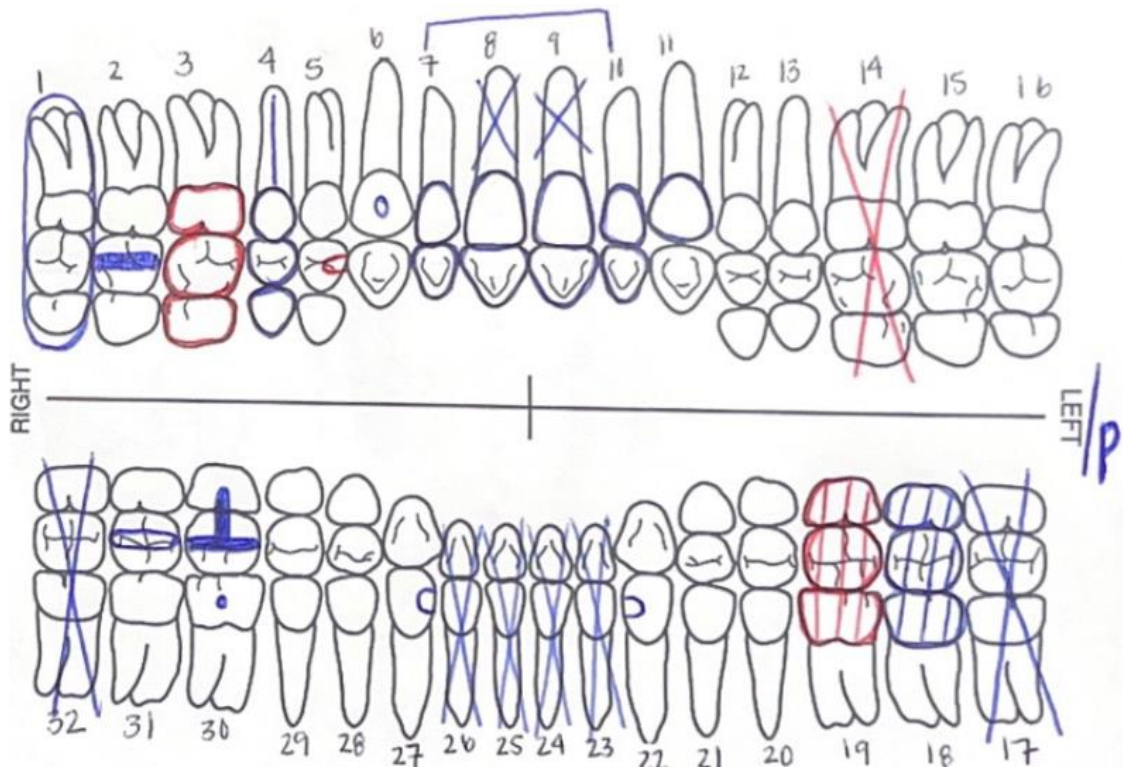
2. Chart all of the **EXISTING restorations** on the charting sheet above.

- | | | |
|------------------------|---------------------------|---------------------------------|
| #1 Impacted | #2 Has MOD Amalgam | #3 Needs Occlusal Amalgam |
| #4 Needs OL Composite | #5 Has Buccal Bond | #6 Needs Veneer |
| #7 Has Cervical Bond | #8 Needs DFIL Composite | #9 Has MFIL Composite |
| #10 Has DL Bond | #11 Needs DF Bond | #12 Has Distal Buccal Composite |
| #13 Has BOL Composite | #14 Has MO Amalgam | #15 Has Buccal Amalgam |
| #16 Missing | #17 Missing | #18 Has Sealant |
| #19 Has Gold Crown | #20 Has MOD Bond | #21 Missing |
| #22 Has Lingual Resin | #23 Needs to be Extracted | #24 Has MFIL Composite |
| #25 Has MFIL Composite | #26 Needs to be Extracted | #27 Needs Facial Bond |
| #28 Missing | #29 Has Occlusal Amalgam | #30 Needs MOD Composite |
| #31 Has Buccal Amalgam | #32 Missing | Pt as a lower partial denture |

Practice Clinical Dental Charting Answer Key:



Practice Reverse Clinical Dental Charting



1. On the completed charting sheet above, number all of the teeth.
2. Below, write down the tooth number and procedure that has already been completed (*blue*) or needs to be completed (*red*).

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Reverse Charting Answer Key

- | | |
|--------------------------------|------------------------------|
| #1 is Impacted | #17,32 is Missing |
| #2 Has a MOD Amalgam | #3 Needs a PFM Crown |
| #4 Has a RCT & Porcelain Crown | #5 Needs a MO Composite |
| #6 Has a Facial Bond | #8 & 9 are Missing |
| #7-10 has a 4-unit PFM Bridge | #11 Has a Veneer |
| #14 Needs to be Extracted | #18 Has a Gold Crown |
| #19 Needs a Gold Crown | #22 & 27 Have a MF Composite |
| #23-26 are Missing | #30 Has MODL, B Amalgam |
| #31 Has a MOD Bond | Pt has a Lower Partial |

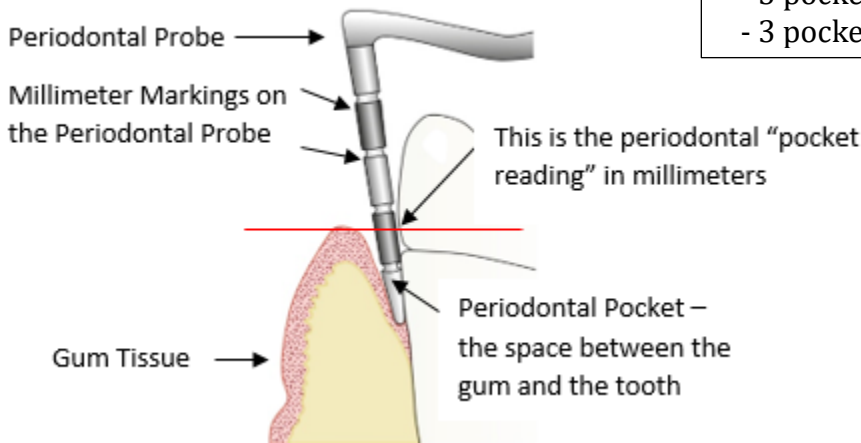
Periodontal Charting

Click below to watch the video tutorial:

<https://www.youtube.com/watch?v=Yv8MIZ2MxKw&list=PLbFPoLfhYcSpOh4RdEFvenJRqM439e0M&index=1>

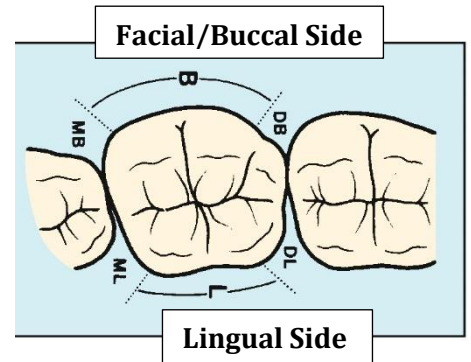
Periodontal Probing is used to measure bone levels and pocket depth on a patient. This procedure is performed by a dentist or a dental hygienist using a Williams Probe. Periodontal probing is using completed one time per year to detect signs of Periodontal Disease.

Periodontal Charting Explained



6 Pockets per tooth

- 3 pockets on the buccal/facial side of the tooth
- 3 pockets on the lingual side of the tooth



Pocket Depth Readings (in millimeters)

1-3mm pocket depth – Within Normal Limits

4mm pocket depth – “Warning” Patient needs to get a good cleaning and start flossing more

5-6mm pocket depth – “Take Action” Patient needs a deep cleaning (SRP) Scaling and Root Planning

7mm+ pocket depth - Refer patient to see a Periodontist (Gum Specialist) for Action

} Indicates Bone Loss

Bleeding Upon Probing

- ◆ At pocket that is bleeding or
- circle the pocket number that has bleeding

Gingival bleeding, present during periodontal probing, is an indicator of active gingivitis or periodontal disease and is noted during periodontal charting.

Mobility:

- Class I 0 = Normal
- Class II 1 = Slight Mobility
- Class III 2 = Moderate Mobility
- 3 = Extreme Mobility

Tooth mobility is the horizontal or vertical displacement of a tooth beyond its normal physiological boundaries. The tooth can move back and forth.



A furcation defect (also called **furcation involvement**) refers to **bone loss at the branching point of the roots**. Furcation can only be present on multi-rooted teeth, not single-rooted teeth.

Furcation Involvement

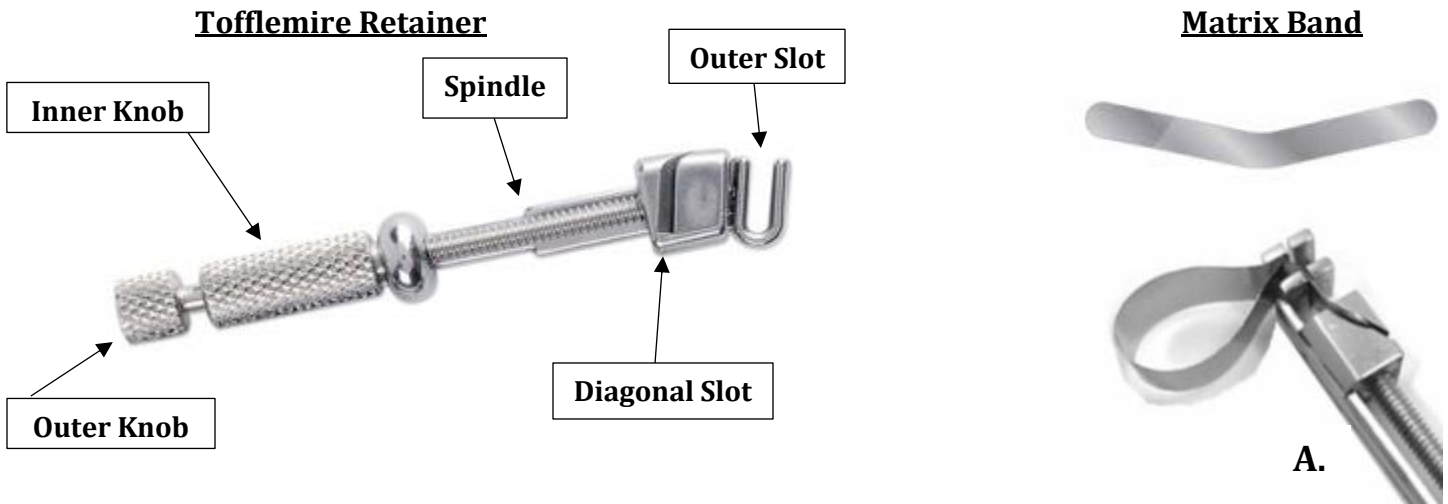


Tofflemire and Matrix Band

Click below for a video tutorial:

<https://www.youtube.com/watch?v=ziX68R9p3E0&list=PLbFPoLfhYcVZloxOdg6UUFmUzmDW0RSK>

Matrix bands provide a temporary wall for a tooth structure to restore the proximal contours and contact to normal shape and function during a procedure. Matrix bands are used for posterior teeth (*molars and premolars*) while Mylar Strips are used for anterior teeth (*canines and incisors*).



Tray Set-Up for Matrix Bands

- Tofflemire Retainer
- Matrix Band
- Wooden Wedges
- Basic Tray Set-Up (*Mirror, Explorer, Cotton Pliers, Air/Water Syringe Tip*)

Parts of the Tofflemire Retainer:

1. **Outer Knob** – Controls the spindle and helps to lock the Matrix Band into place on the Tofflemire Retainer. **Twisting the outer knob to the right** will help lock the Matrix Band into the Tofflemire Retainer. **Twisting the inner knob to the left** will help unlock the matrix band into the Tofflemire Retainer.
2. **Inner Knob** – Drops the diagonal slot down the spindle to the Tofflemire Retainer to tighten the Matrix Band around the crown of the tooth. **Twisting the inner knob to the right** will help to tighten the Matrix Band around the crown of the tooth. **Twisting the inner knob to the left** will help loosen the Matrix Band around the crown of the tooth.
3. **Diagonal Slot** – Where the Matrix Band will be placed into the Tofflemire Retainer.
4. **Outer Slot** – Looks like a “U” shape. There are openings on the right and left side of the outer slot. The Matrix Band will be placed through the diagonal slot and then out to the right or left side of the openings on the outer slot depending on the tooth that’s being worked on. Placing the **Matrix Band through the RIGHT side of the outer slot** when working on teeth in the UR or LL Quadrant. Placing the **Matrix Band through the LEFT side of the outer slot** when working on teeth in the UL or LR Quadrant (*see picture A*

above for an example of the Matrix Band coming out of the right or left side of the outer slot of the Tofflemire Retainer).

Steps to Assembling the Matrix Band into the Tofflemire Retainer:

1. Place the Tofflemire on a flat surface with the Outer Slot facing in the upward direction (*towards the ceiling*).
2. Have the diagonal slot positioned directly underneath the outer slot (*to position the diagonal slot underneath the outer slot, twist the Inner Knob to the right*).
3. Keep about half a centimeter of space between the inner knob and the outer knob (*see picture of Tofflemire above for how to set up of Tofflemire should look*).
4. Have the Matrix Band in the Shape of the letter V (*see picture of Matrix Band above for how the Matrix Band should be*).
5. With both hands, grab the ends of the Matrix Band and fold in towards yourself.
6. Place the tail ends of the Matrix Band through the Diagonal slot and then out to the left or right side of the Outer Slot (*see picture A above for an example of the Matrix Band going through the diagonal slot and then out to the right or left side of the outer slot of the Tofflemire Retainer*).
Tip: Leave a little bit of the tail ends of the Matrix Band out of the Diagonal Slot so that when adjusting the Matrix Band around the tooth, it will not slip out of the Tofflemire Retainer.
7. Once the Matrix Band is in place on the Tofflemire Retainer, twist the Outer Knob to the RIGHT until it is tight to lock the Matrix Band into place in the Tofflemire Retainer. Once completed, be sure to gently pull on the Matrix Band to ensure it is fully locked into the Tofflemire Retainer.
Tip: With your other hand, hold the Inner Knob (*bigger one*) while twisting the Outer Knob (*smaller one*) so it does not move or adjust.
8. Place the Matrix Band around the tooth that is being worked on. The Outer Slot (*U Shape on the Tofflemire*) should always face toward the gums of the tooth you are working on and the Tofflemire Retainer should always be out of the patient's mouth and in the direction of the midline.
9. Twist the Inner Knob to have the Diagonal Slot drop down the Spindle to tighten the Matrix Band around the tooth until it is to desired size.
10. Once the Matrix Band is tightly secured around the tooth, use Cotton Pliers to place the Wedge through the lingual side of the tooth into the proximal surface on the mesial or distal wall; whichever wall(s) of the tooth is missing (*see picture B for reference*).

Steps to Remove the Matrix Band:

1. Using Cotton Pliers, remove the Wedge(s).
2. Twist the Inner Knob of the Tofflemire Retainer (*opposite of the way that it was twisted to tighten the Matrix Band around the tooth*) until the Matrix Band isn't tight around the tooth and then remove from the tooth.

B.



Reminder: Per OSHA, the Matrix Band will be placed into the SHARPS CONTAINER

Sealants

Click below for a video tutorial:

<https://www.youtube.com/watch?v=ohwoZgxOx3s&list=PLbFPoLfHyYCsiTm0RkkLPV5LExli-R9r-&index=1>

Sealants are used to protect and seal the pits and fissures of the occlusal surface on teeth that have not had any previous work done to help prevent cavities. Sealants are primarily done on children as they are not very durable or long-lasting. Therefore, sealants are not a long-term solution to prevent cavities/decay.

Steps to apply sealants:

Step 1: Inspect the tooth to be sealed for decay (DDS has already determined no decay at the exam appointment, assist will reinspect before starting sealant).

Step 2: Polish the tooth to be treated with pumice to remove plaque and debris.

Step 3: Place cotton rolls around the tooth before etching the tooth to isolate the surrounding tissues from the etchant material.

Step 4: Place the etching agent on the appropriate surface(s) of the tooth for the time specified by the manufacturer (approx. 20-30 seconds).

Step 5: Rinse & dry the etched tooth, then verify the appearance of the etched surface is white & chalky. If the appearance is not white & chalky, re-etch the surface(s) again.

Step 6: Remove & replace cotton rolls around the tooth before placing sealant material to prevent contamination by moisture or saliva.

Step 7: Place sealant material on the pits & fissures of the tooth.

Step 8: Light cure the material on the tooth according to the manufacturer's instructions (approx. 20 seconds).

Step 9: Use an explorer to check the sealants retention & ensure there are no voids in the material.

Step 10: Check the occlusion of the tooth with articulating paper to see if the patient's bite is off. If the bite is off, have the dentist adjust the sealant.

Step 11: Ask the dentist to evaluate the treated tooth before the patient is dismissed.

Tray Set-up for Sealants

- Basic Tray Set-up (mouth mirror, explorer, cotton pliers, air/water syringe tip)
- Hygiene Handpiece with disposable prophylaxis angle
- Microbrush
- Etch
- Sealant Material
- Cotton Rolls and 2x2 Gauze
- HVE and Saliva Ejector
- Articulating Paper and Holder
- Curing Light
- Pumice

Bases & Liners

Dycal

Click below for a video tutorial:

<https://www.youtube.com/watch?v=04PxVHy62FQ&list=PLbFPoLfHyYCvZloxOdg6UUFmUzmDWORK&index=3>

Dycal is made up of Calcium Hydroxide and is used as an indirect pulp cap and protective liner for deep cavities. Dycal is a base and a catalyst paste that is a 1:1 ratio mix that will be placed on the deepest part of the cavity prep to protect the nerve of the tooth.

Dycal Procedural Steps

Step 1: Dispense small, equal quantities of the base and catalyst paste onto a paper mixing pad or glass slab.

Step 2: Using a circular motion, mix the Dycal material with a spatula.

Step 3: Immediately use 2x2 gauze to clean the spatula before the material hardens.

Step 4: Using a Dycal Applicator, pick up a small amount of the material and apply a thin layer to the deepest area of the cavity preparation.

Step 5: Use an Explorer to remove any excess material from the walls of the tooth.

Step 6: Immediately clean all instruments and materials used throughout the procedure before the material hardens.

Intermediate Restorative Material (IRM)

Click for a video tutorial: <https://www.youtube.com/watch?v=o4iue4qdI-g>

An intermediate restorative material would be recommended by a Dentist as a short-term restoration. IRM is a reinforced Zinc Oxide-Eugenol composition. Eugenol has a sedative effect on the nerve of the tooth and fillers are added to improve the strength and durability of the material. The IRM is dispensed in a 1:1 ratio.

Common uses of IRM include but are not limited to:

- Restoration of primary teeth
 - Restorative emergencies
 - Caries management programs
 - Placement as a base
-

IRM Procedural Steps

Step 1: Shake the powder before dispensing to loosen the material. When the powder gets fluffed, it will not be packed and condensed, in turn, creating a drier mix.

Step 2: Using the correct measuring spoon, measure 1 scoop of the powder onto the paper mixing pad or glass slab.

Step 3: Dispense 1 drop of the Eugenol mixture next to the scoop of powder.

Step 4: Using a spatula, gradually mix the Eugenol liquid into the powder using force while pushing down to incorporate the 2 components. At this stage, the mixture will be stiff.

Step 5: Once fully mixed, the material should be smooth and adaptable.

Step 6: Place into the tooth

Step 7: Using 2x2 Gauze, clean all materials/instruments before the material hardens.

Cavit

Click below for a video tutorial:

<https://www.youtube.com/watch?v=04PxVHy62FQ&list=PLbFPoLfHyYCvZloxOdg6UUFmUzmDW0RSK&index=3>

Cavit is a Zinc Oxide and Zinc Sulfate-based material that is used as a temporary filling material to fill cavities or occlusion-loaded restorations. Cavit comes in different varieties, including Cavit, Cavit W, and Cavit G. Each variety has a different final hardness and is intended for different clinical purposes.

Cavit Procedural Steps

Step 1: Using a Beavertail, dispense the material onto a paper mixing pad or glass slab. Be sure to close the jar as soon as the material is removed to avoid the material drying out.

Step 2: With gloves, roll the material into a ball and place it into the cavity preparation.

Step 3: Using a Condenser, pack the material into the cavity prep to avoid any voids in the material.

Step 4: Using a Beavertail, shape the material to match the patient's natural occlusion.

Step 5: Allow the material to set.

Dental Dams

Click below for a video tutorial of A4DA's 1-Step Method to Place a Dental Dam:

https://www.youtube.com/watch?v=b_Q1PYKwIZs&list=PLbFPoLfHyYCvMGt0CuoEITREaTNmttdfC&index=1

Click below for a video tutorial of A4DA's 1-Step Method to Place a Dental Dam:

<https://www.youtube.com/watch?v=hYjLiz2icA>

Dental Dams are a thin stretchable material that acts as a barrier and helps a tooth or a couple of teeth be isolated and exposed during a procedure. When the Dental Dam is in place, only the selected teeth are visible.

Reasons a Dental Dam may be used include:

- Serves as an important infection control barrier in the preparation of teeth.
- Safeguards the patient's mouth against contact with debris, dental materials, and other liquids throughout a procedure.

- Protects the tooth from contamination by saliva
 - Protects the oral cavity from exposure when an infected tooth is open during an endodontic procedure.
 - Protects the patient from accidentally aspirating or swallowing debris, such as small fragments of a tooth or scraps of restorative materials.
-

Procedural Steps to Place a Dental Dam

Step 1: Using a dental dam punch, punch a hole into the dental dam in the desired location for the specific tooth or teeth that will be worked on. Be sure to use the correct size of the punch to create a hole for the specific tooth.

Step 2: Using the correct size clamp, tie a ligature (floss) on the bow of the clamp.

Step 3: Place the beaks of the dental dam forceps into the holes of the dental dam clamp. Grasp the dental dam forcep handles and squeeze to open the clamp. Allow the locking bar to slide down to keep the dental dam forceps open for placement.

Step 4: Using the dental dam forceps, place the dental dam clamp around the desired tooth.

Step 5: Transfer the dental dam to the site.

Step 6: Stretch the punched hole in the dental dam around the dental dam that is secure to the tooth.

Step 7: Use cotton pliers to retrieve the ligature and pull through so that it is exposed and easy to grab if necessary.

Step 8: Position the dental dam frame and slightly pull the dental dam allowing it to hook onto the projections of the frame.

Step 9: Using the index fingers of both hands, stretch the dental dam around the mesial and distal edges of the tooth so the dental dam slides through each contact area.

Step 10: With a piece of dental floss, floss through the mesial and distal contacts of the tooth or teeth pushing the dental dam below the proximal contacts of each tooth to be isolated.

Procedural Steps to Remove Dental Dam

Step 1: Using the dental dam forceps, position the beaks into the holes on the dental dam clamp and open the clam by squeezing the handle.

Step 2: Gently slide the dental dam off the tooth to remove both the dam and the clamp simultaneously.

Step 3: Inspect the dental dam to ensure that the entire dental dam is removed.

Step 4: If a fragment of the dental dam is missing, use dental floss to check the corresponding interproximal areas of the oral cavity.

Suture Removal

Click below for a video tutorial:

<https://www.youtube.com/watch?v=jX5zp7r8xJE&list=PLbFPoLfHyYCuruqetmzi2tUIOJI3mb7tY>

Sutures are placed after a procedure to control the bleeding and promote healing. Suture material is available in absorbable and nonabsorbable varieties. Absorbable sutures include plain catgut, chromic catgut, or polyglactin 910 (Vicryl). These materials dissolve and become absorbed by the body's enzymes throughout the body's natural healing process. Nonabsorbable suture materials include silk, polyester fiber, or nylon. Those materials require the patient to return to the dental office for removal 5-7 days after the procedure.

Procedural Steps to Remove Sutures

Step 1: Hold the suture away from the tissue with cotton pliers.

Step 2: Cut the suture with suture scissors, ensuring that the scissors are lying flat near the tissue.

Step 3: Grasp the knot with cotton pliers and gently pull away from the tissue to remove it, keeping it away from the tissue.

Step 4: Count the number of sutures removed and record the total in the patient record.

Clinical Coronal Polishing

Click below for a video tutorial: <https://www.youtube.com/watch?v=hp0M0lnaD4o>

Coronal Polishing is strictly limited to the clinical crowns of the teeth. In some states, coronal polishing is delegated to RDAs (Registered Dental Assistants) or EFDAs (Expanded Functions Dental Assistants) who have received training and are Certified in completing this procedure. Other states have dental hygienists who complete this procedure.

Tray Set-Up for Polishing

- Basic Set-Up
 - Bib
 - 2x2 Gauze
 - Saliva Ejector
 - Hygiene Handpiece
 - Disposable Prophyl Angle
 - Prophyl Paste
 - Floss
 - Fluoride/Varnish
-

Clinical Polishing Procedural Steps

Step 1: Fill the prophyl cup with the prophyl paste.

Step 2: Holding the Hygiene Handpiece in your hand like it is a pen - Spread the prophyl paste from the over 3-4 teeth that you will polish.

Step 3: Establish your fulcrum.

Step 4: Insert the Hygiene Handpiece into the patient's mouth – this will help you retract the cheek so you can see the distal of the molars. ** DO NOT PRESS THE RHEOSTAT until the motor is in the patient's mouth or the prophyl paste will fly out all over you and the patient.

Step 5: Once the Hygiene Handpiece is in the patient's mouth, turn their head towards or away from you depending on which side of the mouth you are working on.

Step 6: Adjust the overhead light so you can see into the patient's mouth

Step 8: Lightly press your foot on the rheostat to start the motor- slow not full-speed

Step 9: Use light intermittent strokes on each tooth, overlapping each stroke

Step 10: You want the rubber cup to touch the tooth and flare the cup out. (Example: Start polishing the distal facial of the tooth, then move the prophylaxis cup to the direct facial, and then the mesial facial. 3 overlapping strokes per tooth).

REMINDER - Use a light amount of pressure and don't stay on the tooth for too long with the prophylaxis cup. If you press too hard on the tooth, it will wear down the enamel or could heat up the tooth and cause damage to the nerve of the tooth.

Step 11: Take the motor out of the patient's mouth and put the saliva ejector in their mouth to remove saliva and prophylaxis paste.

Step 12: Add more prophylaxis paste to the prophylaxis cup.

Step 13: Spread the prophylaxis paste over the next 3-4 teeth that will be polished and repeat until the entire buccal/facial of the Maxillary.

Step 14: Pick up the air/water syringe and saliva ejector and rinse the prophylaxis paste off the maxillary teeth WHILE the saliva ejector is in the patient's mouth.

Step 15: Then repeat the steps to polish the rest of the mouth.

Alginate Impressions & Study Models

Click below for a video tutorial:

<https://www.youtube.com/watch?v=Dllar7shMdY&list=PLbFPoLfHyYCTfmld8LrlgG94kVnLlF5Y8&index=1>

Classifications of Impressions

- Preliminary Impressions: These are taken by the dentist or dental assistant to reproduce the teeth and surrounding tissues. A preliminary Impression can be used for diagnostic models, custom trays, provisional coverage, orthodontic appliances, pretreatment, and posttreatment records.
- Final Impressions: These are taken by the Dentist to produce the most accurate reproduction of the teeth and the surrounding tissues. A final impression provides the dentist and dental laboratory tech with essential information needed for the recreating of indirect restorations, partial or full dentures, or implants.
- Bite Registration: These are taken by the dental assistant to reproduce the occlusal relationship of the maxillary and mandibular teeth when the mouth is occluded. This provides the dentist or dental

laboratory tech with an accurate representation of the patient's centric relationship between the maxillary and mandibular arches.

Alginate Impression Procedural Steps

Preparing to take an Alginate Impression

Step 1: Shake the alginate to “fluff” the contents. After fluffing, carefully lift the lid to prevent the particles from flying into the air.

Step 2: Pre-portion 3 scoops of alginate into a mixing bowl and fill one measuring cup to the third line with room-temperature water for each arch of the mouth.

Step 3: Pour the premeasured water into the bowl that contains the alginate.

Step 4: Use the spatula to mix with a stirring action to wet the powder until it is fully incorporated with the water into 1 fully combined mixture.

Step 5: Firmly spread the alginate between the spatula and the side of the rubber bowl.

Step 6: Spatulate the material for the appropriate length of time, until the mixture appears smooth and creamy.

Loading the Material into a Mandibular Impression Tray and Placing in the Mouth

Step 1: Gather half the alginate in the bowl onto the spatula, and then wipe the alginate into one side of the tray from the lingual side. Quickly press the material down to the base of the tray.

Step 2: Gather the remaining half of the alginate in the bowl onto the spatula, and then load the other side of the tray in the same way.

Step 3: Smooth the surface of the alginate by wiping a moistened finger along the surface.

Step 4: Place the additional material over the occlusal surfaces of the mandibular teeth.

Step 5: Retract the patient’s cheek with the index finger, turn the tray slightly sideways when placing it into the mouth, and center the tray over the teeth.

Step 6: Observe the alginate around the tray to determine when the material is set.

Step 7: Place fingers on top of the impression tray, and gently break the seal between the impression and the peripheral tissues by moving the inside of the patient’s cheeks or lips with the finger.

Step 8: Grasp the handle of the impressions tray with the thumb and index finger, and use a firm lifting motion to break the seal.

Step 9: Pull up on the tray to remove from the mouth.

Step 10: Spray a paper towel with an approved disinfectant and wrap around the completed impression.

Loading the Material into a Maxillary Impression Tray and Placing in the Mouth

Step 1: Load the maxillary tray in one large increment and use a wiping motion to fill the tray from the posterior end.

Step 2: Place the bulk of the material toward the anterior palatal area of the tray.

Step 3: Moisten the fingertips with tap water and smooth the surface of the alginate.

Step 4: Retract the patient's cheek with the index finger, turn the tray slightly sideways when placing it into the mouth, and center the tray over the teeth.

Step 5: Seat the posterior border (back) of the tray up against the posterior border of the hard palate to form a seal.

Step 6: Directed the anterior portion of the tray upward over the teeth.

Step 7: Gently lift the patient's lips out of the way as the tray is seated and instruct the patient to tilt their head forward.

Step 8: Check the posterior border of the tray to ensure that no material is flowing into the patient's throat.

Step 9: Hold the tray firmly in place while the alginate sets.

Step 10: To avoid injury to the impression and the patient's teeth, place a finger along the lateral borders of the tray to push down and break the palatal seal.

Step 11: Use a straight, downward snapping motion to remove the tray from the teeth.

Step 12: Spray a paper towel with an approved disinfectant and wrap around the completed impression.

Mixing Dental Plaster

Click below for a video tutorial:

<https://www.youtube.com/watch?v=7HMUkE0ZxRY&list=PLbFPoLfHyYctfmlld8LrIlgG94kVnLlF5Y8&index=3>

Step 1: Measure 50 ml of room temperature water into a clean rubber mixing bowl and 100 g of dental plaster.

Step 2: Add the water to the plaster in steady increments.

Step 3: Mix until the components are a frosting-like consistency.

Step 4: Turn the dental vibrator to a low or medium speed and place the bowl of plaster mix on the vibrator platform.

Step 5: Lightly press and rotate the bowl on the vibrator until air bubbles rise to the surface.

Pouring Dental Study Models

Step 1: Use air to remove excess moisture from the impression or pat the impression upside down onto a dry paper towel.

Step 2: Set the vibrator at a low to medium speed.

Step 3: Hold the impression tray by the handle and place the edge of the tray onto the vibrator.

Step 4: Place small increments of plaster in the impression near the most posterior tooth.

Step 5: Continue to place small increments in the same area as the first increment and allow the plaster to flow toward the anterior teeth.

Step 6: Turn the tray on its side to provide a continuous flow of the material forward into each tooth impression.

Step 7: When all teeth in the impression are covered, add larger increments until the entire impression is filled.

Step 8: Place the additional material onto a glass slab (or tile) and shape the base to approximately 2 × 2 inches and 1 inch thick.

Step 9: Invert the impression onto the new mix without pushing the impression into the base.

Step 10: Use a spatula to smooth the plaster base mix up onto the margins of the initial pour.

Separating the Cast from the Impression

Step 1: Wait 45 to 60 minutes after the base was poured before separating the impression from the model.

Step 2: Use the laboratory knife to gently separate the margins of the tray.

Step 3: Apply firm, straight, upward pressure on the handle of the tray to remove the impression.

Step 4: Pull the tray handle straight up from the model.
