

Dam-It, It's Easy



Handbook of basic dental dam procedures

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Content Developed by:
Mary R. Costello, EFDA, BS

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Lesson 1

Benefits of Using Dental Dam

LEARNING OBJECTIVES

- Upon completion of this section, you should be able to list the major benefits of using dental dam.

TERMINOLOGY

Aseptic: Free of infectious microorganisms.

Microbial: Containing disease causing microorganisms.

BENEFITS OF USING DENTAL DAM

Dental dam has been in existence for over one hundred years, yet this potential practice builder has been overlooked due to the misconception that its application is both time-consuming for professionals and unpopular with patients. In reality, dental dam utilization has five important benefits:

- 1. PATIENT PROTECTION/RISK MANAGEMENT:** With dental dam placed, the aspiration or swallowing of debris and foreign objects is decreased. Patients experience a feeling of separation from restorative procedures and are more comfortable and relaxed.
- 2. INCREASED ACCESS/VISIBILITY:** Properly placed dental dam eliminates the common visual obstructions encountered during operative procedures (the cheeks, lips and tongue). Operative field access and visibility are vastly improved.
- 3. IMPROVED TIME EFFICIENCY:** Properly placed dental dam provides a clearly defined operative field, allowing the dental team to work with greater efficiency.
- 4. MOISTURE CONTROL/IMPROVED QUALITY:** Many dental restorative materials are adversely affected by saliva. Because properly placed dental dam promotes a moisture-free, uncontaminated working environment, these materials are permitted the luxury of setting under optimum conditions. The quality of the resulting restorations or procedures is undeniably superior to those performed without dental dam utilization.

- 5. INFECTION CONTROL:** The oral cavity is the prime source of microbial contamination during dental procedures, either through direct contact or aerosolization from high speed instruments. Properly placed dental dam acts as an effective barrier between the oral cavity and the operative field.

SELF-EVALUATION EXERCISES

Insert the missing text in the blank spaces listed below.

1. The dental dam _____ access and visibility by _____ the most common obstructions encountered during operative procedures which are the _____ and _____.
2. The dental dam provides the patient protection from _____ or _____ any foreign objects or debris.
3. Because properly placed dental dam promotes a _____,working environment, restorative materials are permitted to set under _____ conditions.
4. Properly placed dental dam acts as an effective barrier between the oral cavity and the operating field, thereby reducing _____ contamination during restorative procedures.
5. Patients feel comfortable with the dental dam in place because it _____ debris from collecting at the back of the throat and acts as a _____ between them and the procedure.
6. Because a properly placed dental dam provides a clearly defined _____ field, the dental team may work with greater _____.
7. Greater clinical success is achieved with the dental dam due to increased _____ control, greater _____ to the operating field, and increased patient _____.



Lesson 2

Product Descriptions and Properties

LEARNING OBJECTIVES

- Identify the usage of the various sizes, colors, and gauges of dental dam.
- Identify proper storage conditions of dental dam.
- Identify non-contamination precautions required when storing and using non-latex dental dam.

TERMINOLOGY

Gauge: Refers to thickness (weight) of dental dam.

Transillumination: A phenomenon whereby light passes through the dam, illuminates the pulp chamber, and enhances visualization of the root canal orifices of a tooth (endodontic treatment).

CATEGORIES OF DENTAL DAM

Ready-Cut Dam

5" x 5" sheets (52 pieces per box)

Used for endodontic, pediatric dentistry, and anterior applications.

6" x 6" sheets (36 pieces per box)

Used for adult operative procedures.

Convenience Packs

5" x 5" /127mm x 127mm sheets (364 pieces per box)

6" x 6"/152mm x 152mm sheets (360 pieces per box)

Available in:

- Thin and medium gauges green, dark, and light
- Medium gauge FIESTA® Dental Dam
- Non-Latex Dam available in convenience pack of 75 sheets per box
- Elasti-dam (powder-free latex dam), medium and heavy gauges in green and blue

Roll Dam

5" x 22'/127mm x 6.7m roll

6" x 18'/152mm x 5.5m roll

Roll Dam may be cut to any desired length and is used less frequently than Ready-Cut Dam. All boxes contain one square yard of material.



Fiesta Dental Dam

An assortment of three fruit-scented pastel colors of pink, blue, and purple. Available in thin, medium, heavy, 5" x 5" and 6" x 6" sheets.

Non-Latex Dental Dam

Recommended for individuals who are sensitive to natural rubber latex. Application techniques are similar to those used with conventional dam. Steps should be taken not to contaminate Non-Latex Dental Dam with other instruments or products which have come into contact with latex dam (punch, templates, stamps, etc.).

Non-Latex gloves should be used during patient treatment. Store Non-Latex Dental Dam separately from latex products.

Hygenic Non-Latex Dental Dam is available in medium gauge, 6" x 6" and 5" x 5" in packs of 15 sheets or a 75 sheet convenience pack (6" x 6" only).

The Hygenic Flexi Dam® Non-Latex Dental Dam offers greater strength and is available in medium gauge, 6" x 6", 30 sheets/pack only.

Type of Dam	Benefits	Usage Recommendations	
		Endo	Resto
Light	Increased transillumination Enhanced view of clinical field Vanilla scented/greater patient acceptance	✓	
Dark	Color contrast of clinical field Increased visibility		✓
Green	Color contrast of clinical field Increased visibility Mint scented/greater patient acceptance	✓	✓
Blue	Improved photographic contrast of clinical field		✓
Fiesta Dental Dam (pink, blue, purple)	Fruit-scented Greater patient acceptance	✓	✓
HYGENIC Non-Latex Dental Dam (teal green)	100% latex-free & powder free No patient or staff reaction to latex Increased transillumination Enhanced view of clinical field Extensive shelf-life More tear resistant elastic than latex dam No offensive odor	✓	✓
HYGENIC Flexi-Dam Non-Latex Dental Dam (purple, teal green)	100% latex-free & powder free No patient or staff reaction to latex Increased transillumination Enhanced view of clinical field Extensive shelf-life More tear resistant elastic than latex dam No offensive odor	✓	✓

GAUGES (WEIGHTS)

THIN: (.006" ± .002")
Recommended for endodontic isolations. The thinner the dam, the easier to apply. However, it does not retract soft tissues as well as heavier weights.

MEDIUM: (.008" ± .002")
This weight is most often used because it is easy to manipulate.

HEAVY: (.010" ± .002")
Recommended for restorative procedures, as it aids in the retraction of soft tissues.

EXTRA-HEAVY (0.12"± .002")
Affords maximum tissue retraction.

SPECIAL-HEAVY (0.14"± .002")
The heaviest weight; available in dark color. Recommended for special isolations where tissue protection is paramount (i.e., bleaching procedures).

SHELF-LIFE

Natural rubber latex dental dam is a perishable product. It is sensitive to age and storage conditions. Many variables (especially temperature) affect this material, therefore it should be stored in temperatures less than 80°F or 26°C.

Non-Latex Dental Dam is not as sensitive to temperature as latex dental dam but should be stored at ambient room temperature to maximize shelf life.

DATE CODE

For best product performance, dental dam should be used prior to the expiration date listed on the box.

Dental Dam	Thin		Medium		Heavy		Extra Heavy		Special Heavy	
	5x5*	6x6**	5x5	6x6	5x5	6x6	5x5	6x6	5x5	6x6
Light	✓	✓	✓	✓	✓	✓	✓	✓		
Dark	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Green	✓	✓	✓	✓	✓	✓	✓	✓		
Blue			✓	✓	✓	✓				
Fiesta Dental Dam	✓	✓	✓	✓	✓	✓				
Non-Latex Dental Dam			✓	✓						
Flexi-Dam				✓						

SELF-EVALUATION EXERCISES

1. Dental dam is available in:
 - a.) Ready-cut 5" or 6" square sheets
 - b.) Rolls (5" or 6" wide)
 - c.) A variety of colors
 - d.) Non-Latex
 - e.) All the above
2. Light dam is used for procedures due to increased _____ .
3. The darker colors provided _____ and reduce the glare from the light.
4. Thin dam is often used for _____ isolation, as tissue retraction is not critical for this procedure.
5. _____ gauge dam is most frequently used, due to its ease of application.
6. Benefits of using the heavier weights of dam are increased _____ and protection of the _____ tissues.
7. It is imperative to take the necessary precautions not to _____ the Non-Latex Dental Dam with latex-containing products; therefore, Non-Latex Dam should be stored _____ and non-latex exam gloves should be used with this product.



Lesson 3 / Step 1

Simplified Steps of Dental Dam Application

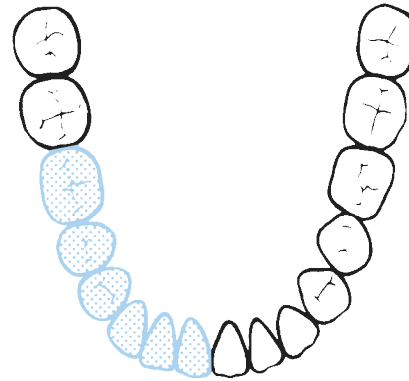
Step 1: Determine the Operating Field

LEARNING OBJECTIVES

- Identify which teeth to include in the operating field for the following isolations:
 - Posterior Isolation
 - Anterior Isolation
 - Single Tooth (Endodontic) Isolation
 - Pediatric dentistry Isolation

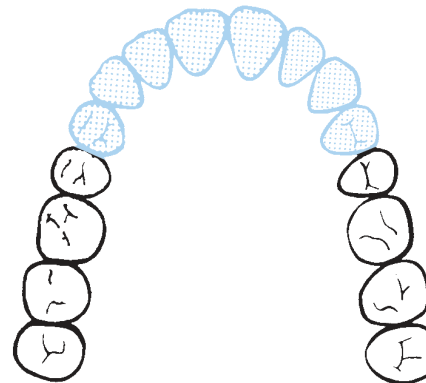
TERMINOLOGY

Operating field: Includes the tooth (teeth) to be treated in addition to other teeth which are isolated to gain better access and visibility.



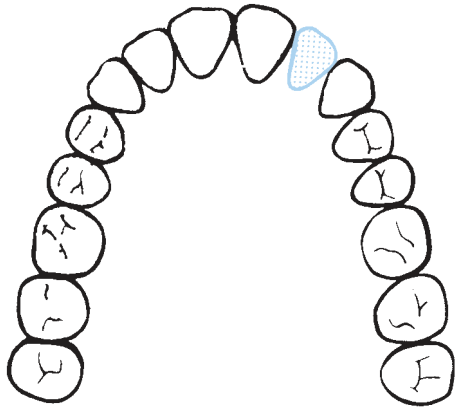
POSTERIOR ISOLATION

One tooth distal to the tooth (teeth) being treated and extend to midline.



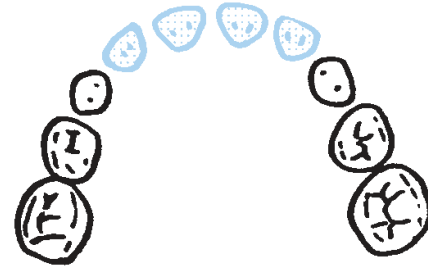
ANTERIOR ISOLATION

Include premolar to premolar.



SINGLE-TOOTH (ENDODONTIC/SEALANTS) ISOLATION

Include only the tooth being treated.



PEDIATRIC DENTISTRY ISOLATION

Isolate one tooth mesial and distal to the tooth (teeth) being treated.

SELF-EVALUATION EXERCISES

Fill in the blanks.

1. It is necessary to _____ a sufficient number of teeth in order to provide good _____ and _____ of the operating field.

Match the following:

Posterior Isolation _____

Pediatric dentistry Isolation _____

Anterior Isolation _____

Single-tooth Isolation _____

a. Used for sealants and endodontic treatment

b. Isolate premolar to premolar

c. Isolate one tooth distal to treated tooth and extend to midline

d. Isolate teeth directly involved in procedure, usually three or four teeth



Lesson 3 / Step 2

Simplified Steps of Dental Dam Application

Step 2: Dental Dam Preparation

LEARNING OBJECTIVES

- Identify the necessary steps required to prepare the dental dam for placement.

TERMINOLOGY

Template: A device containing the imprint of the dental arch used for marking hole positions on the dental dam.

Punch table: That part of the dental dam punch that contains the cutting edge used to perforate the holes in the dental dam.

Tissue-side of dam: That part of the dam that goes toward the patient's soft tissues.

Interseptal dam: That part of the dam that is placed between the teeth (dam between the punched holes).

PRACTICAL EXERCISES

Determine Hole Positions

Hole positions can be easily marked using a template. The template provided in Appendix G is for the adult dentition and is to be used with the 6" x 6" dental dam.

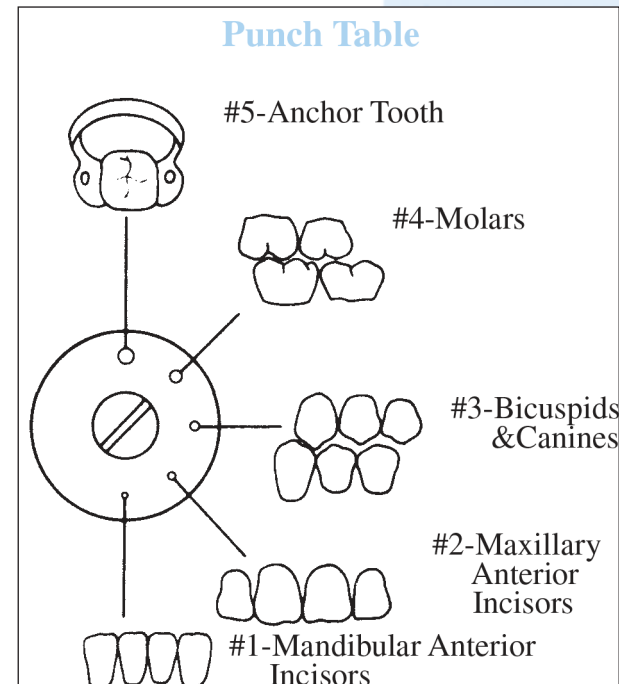
Marking Hole Positions

Place the dam on top of the template and mark the holes for teeth #25 to #30 (41 - 46*) using a felt-tip pen.

Punching Holes

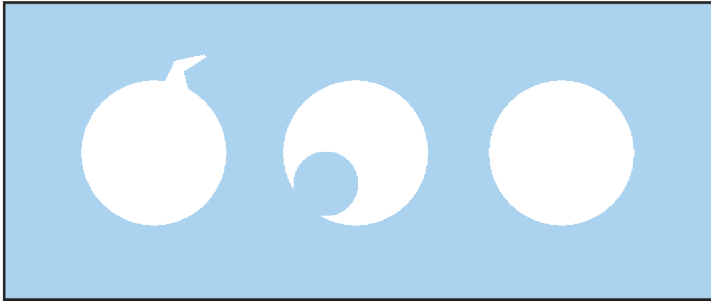
Punch the appropriate hole sizes for the teeth to be included in your isolation (see diagram).

When using Non-Latex Dental Dam, it is advisable to punch one hole size smaller than recommended for latex dam.



*International Identification System

Proper punching includes proper alignment of the punch table with the pin, alignment of the pin with the hole mark on the dam, and punching; then, pulling the dam up over the point of the punch.



An improperly cut hole will result in a nick or tag that may cause the dam to rip while it is being placed (consistent nicks or tags may be indicative of a dull punch).

Water-Soluble Lubricant

A water-soluble lubricant (KY®Jelly) is placed on the tissue side (non-powdered) of the dam. The lubricant facilitates placement of the interseptal dental dam. Vaseline® is not recommended as it does not readily rinse off the surfaces of the teeth.

Notes:

KY® Jelly is a trademark of Johnson & Johnson Vaseline® is a trademark of Chesebrough Ponds USA Co.



Lesson 3 / Step 3

Simplified Steps of Dental Dam Application

Step 3: Retainer Selection/Application

LEARNING OBJECTIVES

- Identify the two methods of retaining the dental dam.
- Identify the two types of clamps and list the categories of clamps and their uses.
- Describe the methodology of clamp placement and the techniques discussed for placement of the dental dam using winged and wingless clamps and WEDJETS® Cord.

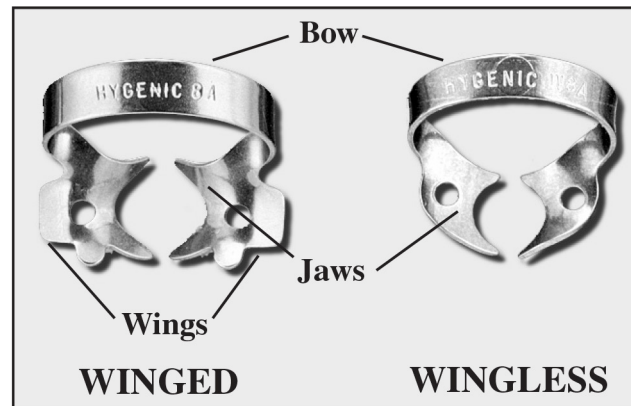
TERMINOLOGY

Retainer: A device that anchors the dental dam in place (i.e., clamps, WEDJETS® Cord).

Clamp Forceps: An instrument that engages the clamp and allows for activation during placement and removal of the clamp.

RETAINER SELECTION

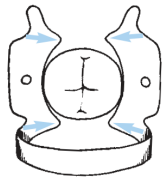
Retainers are a general classification for devices that hold the dental dam in place. Examples of retainers are clamps and WEDJETS® Cord.



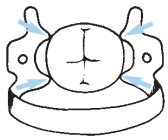
There are two types of clamps: winged and wingless. Winged clamps have projections at the jaws, while wingless do not. A wingless clamp is designated by a "W" which precedes its number. An "A" following the number identifies a clamp with subgingival jaws.

Please note the anatomical landmarks for each style clamp. When placing a clamp, the bow of the clamp is positioned on the distal of the tooth.

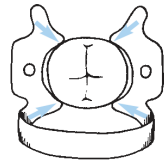
CLAMP SELECTION GUIDELINES



Too Large



Too Small



Correct

Select a clamp that will maintain four-point contact with the tooth's proximal surfaces. If a clamp is too large, it will impinge on the soft tissues. If it is too small, it will not properly grasp the tooth's surface, and will be unstable.

SELECTING THE APPROPRIATE CLAMP

Anterior Tooth: Use a double-bowed clamp (i.e. #9).

Premolar: Use a small, flat-jawed clamp, (i.e. #00, #2) or curved-jawed clamp (#1) for maxillary premolar.

Mandibular Molar: Use a flat-jawed clamp, (i.e. #3, #7).

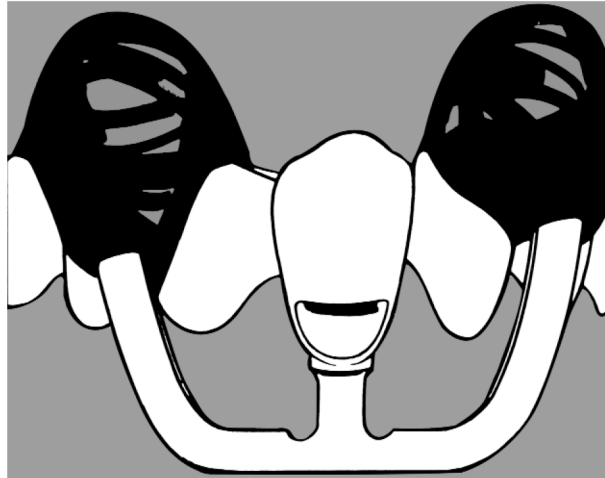
Maxillary Molar: Use a clamp with curved jaws (i.e. #8, #56, #4).

Partially-Erupted Tooth: Use a clamp with subgingivally designed jaws, suitable to the size of anchor tooth (i.e. #2A, #8A, #14, #14A).

Structurally Compromised Tooth: Use a clamp with serrated jaws (i.e. #12A, #13A).

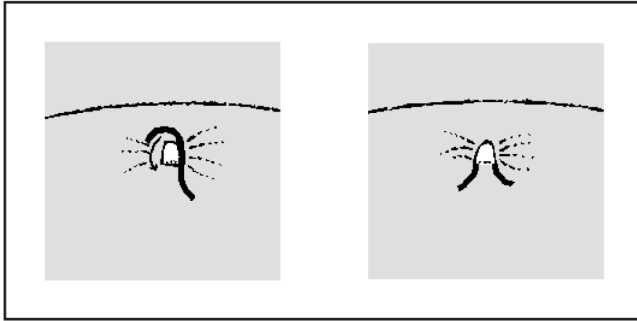
ISOLATION FOR CLASS V RESTORATIONS

It is recommended to stabilize the #212, #B4, #B5, and #B6 clamps with stick impression compound. Once the clamp is seated, soften the compound over a flame, temper in hot water, and adapt around one bow of the clamp while pressing it into the embrasures of the adjacent teeth. Repeat process for the other bow.

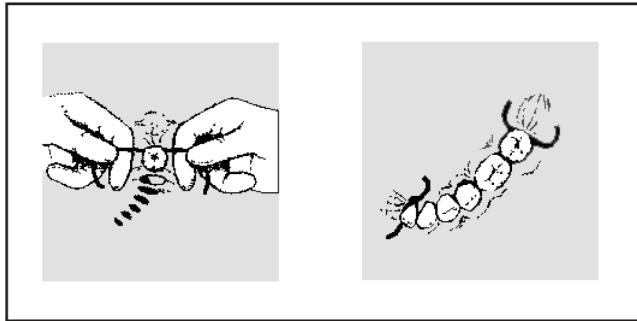


Isolation for Class V Restoration

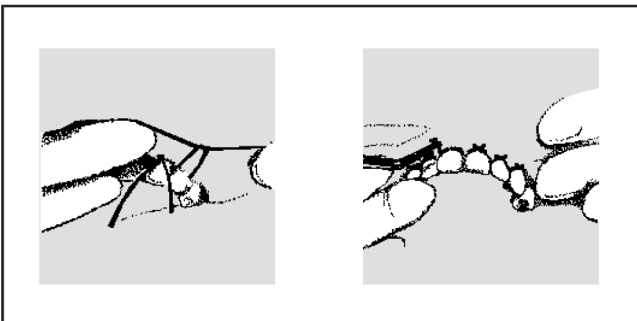
USING WEDJET[®] DENTAL DAM STABILIZING CORD



Single-Tooth Isolation



Quadrant Isolation



Bleaching/Class V Restorations

PRACTICAL EXERCISES

Basic Clamps

Using the information you have learned, match the appropriate clamp numbers to the descriptions that best describe them. (Some responses may have more than one answer.)

- ___ Most common premolar clamp
- ___ Used for partially erupted or irregularly-shaped molars
- ___ Universal maxillary molar clamp
- ___ Large mandibular molar clamp
- ___ Used for maxillary premolars or deciduous teeth
- ___ Small mandibular molar clamp
- ___ Used for small maxillary molars or deciduous teeth
- ___ Used for small premolars, incisors, or deciduous teeth
- ___ Universal maxillary and mandibular molar clamp
- ___ Used for maxillary or mandibular anterior teeth for single-tooth isolation
- ___ Mandibular and maxillary molar clamps with serrated jaws for greater retention



#00



#2



#4



#8



#9



#13A



#14A



#1



#3



#7



#8A



#12A



#14



#W56

Specialty Clamps

Match the following:

___ Used for crown and bridge preparation and cementation

___ Used for gingival retraction for placement of Class V restorations for anterior teeth

___ Specially designed to allow seating to the depth of the gingival sulcus without lacerating tissue

___ A paired set of clamps used for upper molars

___ Lower molar clamp

___ May be used for pediatric dentistry applications



#B1



#B2



#B3



#B4



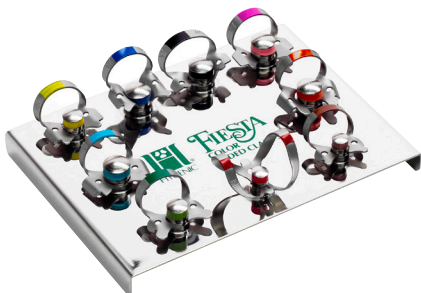
#B5



#B6

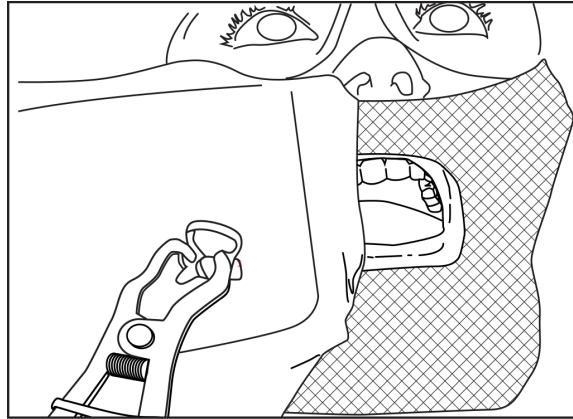
FIESTA COLOR CODED CLAMPS BENEFITS:

1. Color coded clamps and organizer provide easy identification and storage.
2. Clamps have a matte finish for better visibility.
3. Clamps are available in both winged and wingless styles (# 2, 2A, 4, 7, 8A, 9, 12A, 13A, 14A, W2, W2A, W3, W7, W8, W8A, W9, W56 and W14A).
4. Clamps may be cleaned and sterilized on color coded stainless steel clamp organizer.



PRACTICAL EXERCISES

Application Techniques

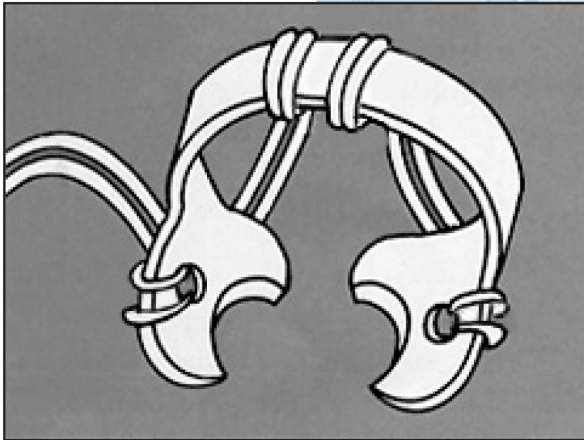


The Winged Technique: The advantage is that steps are eliminated because the dam, clamp, and frame are simultaneously carried to the patient's mouth for placement. Take the time now to prepare the dental dam for placement using the winged technique.

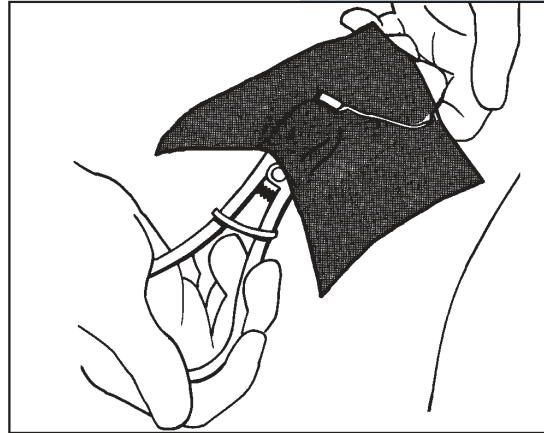
* It is recommended that a safety ligation also be placed on a winged clamp to protect the patient should the clamp become dislodged from the dam.

PRACTICAL EXERCISES

Application Techniques



The Wingless Technique: The clamp is placed on the tooth first, and the dam is stretched over the clamp and tooth. Tie a safety ligation* to the clamp to prevent swallowing should the clamp become dislodged. Now place a safety ligation on a wingless clamp.



The Modified Winged Technique: The dam is stretched over the bow of the clamp prior to its placement in the mouth. The clamp is seated and the dam is stretched over the jaws and tooth. Take the time now to prepare the dental dam using the modified winged technique. (Don't forget the safety ligation on the clamp!)

* It is recommended that a safety ligation also be placed on a winged clamp to protect the patient should the clamp become dislodged from the dam.

Lesson 3 / Step 4

Simplified Steps of Dental Dam Application

Step 4: Dental Dam Placement

LEARNING OBJECTIVES

- Identify the sequence for dental dam placement.
- Describe the procedures for managing interproximal placement of the dental dam.
- Describe the methods of inverting the dental dam.

TERMINOLOGY

Interproximal: Relating to the area between crowns of adjacent teeth.

Inversion: Tucking the edges of the dental dam into the gingival sulcus to create a moisture seal around the necks of the teeth.

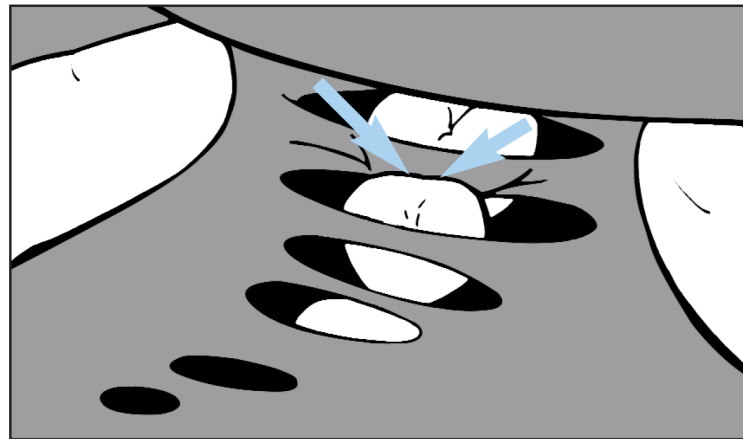
Knifed-Edge Technique: A technique whereby an edge of the interseptal dental dam is knifed through the contact area.

Loop-Technique: A technique that uses waxed dental floss to place the interseptal dental dam through the contact.

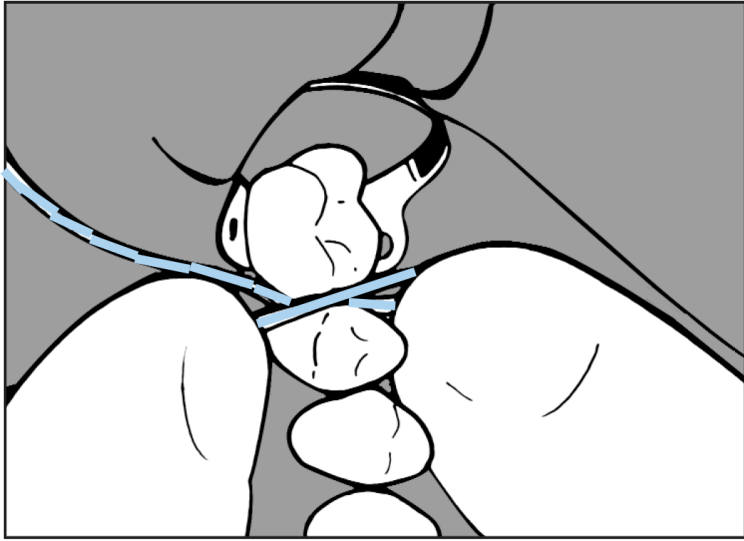
PROCEDURAL REVIEW

INTERPROXIMAL PLACEMENT OF DENTAL DAM

Interproximal placement of the interseptal dental dam may be easily accomplished if a water-soluble lubricant is applied to the dam and the following techniques are employed.



KNIFED-EDGE TECHNIQUE: A common mistake made is to bunch the dental dam while trying to force it all through the contact at the same time. Instead, “knife” the edge through the contact area. If the contact is not very tight, the dam should slip through it.



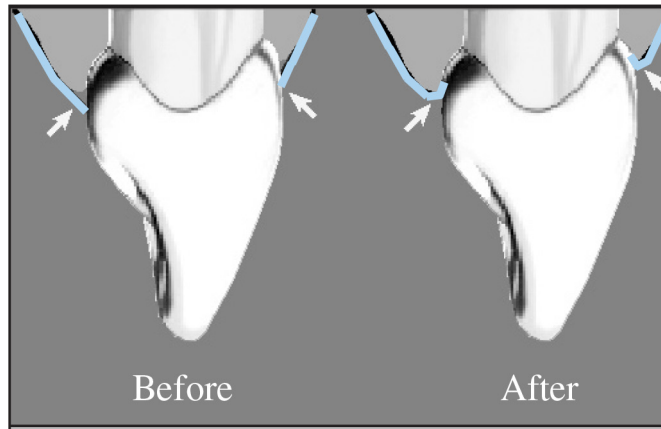
LOOP TECHNIQUE: For more difficult contacts, use waxed floss to carry an edge of the dam through the contact area. The lingual end of the floss is looped over and inserted into the contact, while carrying more dam with it. Remove floss by pulling both ends buccally without disturbing the dam.

Practical Exercises

SEQUENCE OF DENTAL DAM PLACEMENT

The following sequence of application is out of procedural order. Insert the appropriate number that corresponds to the correct chronological sequence (i.e., #1 should identify the first step in the application; #2, the second step, etc.).

- ___ Use the Loop Technique to pass dam between tight contacts.
- ___ Place napkin and frame.
- ___ Decide which application technique to use.



CREATING A MOISTURE SEAL

Inversion of the edges of the dental dam is essential in creating a moisture seal around the necks of the teeth. A description of this technique follows.

INVERSION: Using a blunted instrument and a steady stream of air, tuck the edges of the dental dam into the gingival sulcus.

- ___ Invert dental dam.
- ___ Secure dental dam posteriorly with a dental dam retainer.
- ___ Determine which teeth to include in operating field.
- ___ When placing dam interproximally, use Knife-Edged Technique to properly align dam between the teeth.
- ___ Prepare dental dam for isolation procedure.
- ___ Secure dental dam anteriorly using WEDJETS® Cord.



Lesson 3 / Step 5

Simplified Steps of Dental Dam Application

Step 5: Dental Dam Removal

LEARNING OBJECTIVES

- Identify the correct steps for dental dam removal.

PRACTICAL EXERCISES

The following sequence for dental dam removal is not in the correct order. Insert the appropriate number that corresponds to the correct chronological order (i.e., #1-first step in removal process; #2-second step, etc.).

- ___ Remove clamp.
- ___ Insert finger into buccal vestibule to protect patient's lip during cutting procedure.
- ___ Cut interseptal dam with entire blade of a blunted scissors.
- ___ Wipe patient's face.
- ___ Check for missing pieces of interseptal dental dam.
- ___ Pull interseptal dam in a lateral direction away from the soft tissues.
- ___ Rinse patient's mouth.
- ___ Remove frame.
- ___ Remove WEDJETS® Cord.



Lesson 4

Pearls of Wisdom/Unique Techniques

LEARNING OBJECTIVES

- Identify the various options available when using matrix bands with the dental dam.
- State specific reasons for leakage around the dental dam and what may be done to correct the problem.
- Identify two techniques for isolation of structurally compromised teeth.
- Identify the procedures for which general field isolation is recommended.

TERMINOLOGY

General Field Isolation: An isolation technique whereby the dental dam is slit between two punched holes and applied to the operating field. This procedure eliminates placing the dam interproximally.

SELF-EVALUATION EXERCISES

1. A frequent problem of using a conventional matrix system with the dental dam is the _____ _____ infringes on the wings of the clamp which prevents _____ seating of the matrix band.
2. Which of the following techniques may be used when dealing with interproximal restorative treatment?
 - a. Use a “retainerless” matrix system.
 - b. Cut and contour a standard matrix band, while using wooden wedges interproximally to maintain contact and retention.
 - c. Reposition the interseptal dental dam to an adjacent tooth during preparation so that the dam does not tear.
 - d. Place a wooden wedge interproximally to depress the interseptal dam to prevent its tearing.
 - e. All of the above.
3. List three reasons for leakage around the dental dam.

4. List a technique for isolating structurally compromised teeth.

5. General field isolation is recommended for which of the following situations:

- a. When isolating around fixed bridges.
- b. For crown removal and cementation procedures.
- c. For preparation and cementation of laminate veneers.
- d. All of the above.

Notes:



Appendix A

Glossary

Anchor Tooth	The tooth receiving the dental dam retainer (clamp).	Composite	A tooth-colored dental restorative material.
Anterior	Toward the front.	Contact Point	The location where the teeth touch each other (also contact area or contact).
Anterior Teeth	The mandibular and maxillary cuspids and incisors.	Deciduous Teeth	The teeth of the first dentition, which are shed and followed by the permanent dentition.
Armamentarium	The equipment and instruments of a practitioner; in this case, instruments required to apply dental dam.	Dental Dam Clamp	An instrument that engages the clamp and allows for activation during placement and removal of the clamp.
Aseptic	Free of infectious microorganisms.	Dental Dam Punch	An instrument used to punch holes in the dental dam.
Bicuspid	A tooth with two cusps. Same as premolar.	Dental Dam Punch Table	That part of the dental dam punch that contains the cutting edge used to perforate the holes in the dental dam.
Buccal	Adjacent to the cheek.	Distal	Away from the midline.
Canine	One of four teeth located distally to the lateral incisors, having a long conical crown and a single root (also known as cuspid).	Endodontic	Relating to the treatment of the tooth pulp (root canal therapy).
Cariou Lesion	Tooth decay.		
Clamp	A device used to retain the dental dam. Also referred to as a retainer.		
Class V Restorations	Cervical restorations.		



Fixed Prosthesis	A replacement for one or more missing teeth that is cemented or bonded and is not removable by the patient (crown, onlay, or bridge).	Knifed-Edge Technique	A technique whereby an edge of the interseptal dental dam is knifed through the contact area.
Gauge	Thickness of dam (i.e., thin, medium, heavy, etc.)	Laminate Veneer	A type of tooth-colored restoration made of either porcelain or composite that is bonded to a prepared tooth surface.
General Field-Isolation	A technique for isolating several teeth by "slitting" the dam between two punched holes.	Ligate	To tie with a ligature.
Gingiva	The mucous membrane that surrounds the necks of erupted teeth.	Ligature	A thread or wire used for tying.
Gingival	Pertaining to the gingiva.	Lingual	Pertaining to the tongue.
Incisor Teeth	The four front teeth in the maxillary and mandibular arch.	Loop Technique	A technique whereby waxed dental floss is used to place the interseptal dental dam through the contact area.
Incisal Edge	Refers to the cutting edge of the anterior teeth.	Malposed	Not in the normal position.
Interdental	Situated between the proximal surfaces of adjacent teeth located in the same arch.	Mandibular	Pertaining to the lower jaw bone or mandible.
Interseptal Dam	That part of the dam which is placed between the teeth.	Maxillary	Pertaining to the maxilla or upper jaw.
Inversion	Tucking the edges of the dental dam into the gingival sulcus to create a moisture seal around the necks of the teeth.	Mesial	The surface of a tooth that faces toward the midline.
		Microbial	Containing disease-causing microorganisms.
		Operating Field	Refers to the isolation field, which includes the tooth (teeth) to be treated in addition to other teeth that are isolated to gain better access and visibility.



Pediatric dentistry	Pertaining to the treatment of conditions of the teeth of children.	Septum	A dividing wall or partition.
Premolar	A posterior tooth with points and cusps for grasping, tearing, and chewing.	Serrated Clamp	A clamp with notched sawlike edges located along the jaws of the clamp.
Posterior	Toward the back.	Sulcus (gingival)	A shallow groove between the tooth and the gingiva.
Posterior Teeth	The mandibular and maxillary premolars and molars.	Template	A device used for marking hole positions on the dental dam.
Radiolucent	That which permits X-rays to pass through, yet has some resistance to their passage.	Tissue-Side of the Dam	That side which is placed toward the patient's soft tissues (glossy side).
Radiopaque	Not permitting the passage of X-rays: the representative areas appearing white on exposed film.	Transillumination	A phenomenon whereby light passes through the dam, illuminates the pulp chamber, and enhances visualization of the root canal orifices of a tooth.
Restoration	A general term used to designate a filling, crown, bridge, partial or full denture used to restore part or all of the dentition to normal function.	Tofflemire*	Type of retainer used to retain a matrix band in place during placement of a restoration.
Retainer	An appliance or device for retaining anything in position.	Vestibule (buccal)	The corridor between the gingiva, lips, and (buccal) cheeks.



*Tofflemire is not a registered trademark of Coltène/Whaledent, Inc.

Appendix B

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Appendix C

Answers to Self-Evaluation Exercises

LESSON 1

1. Increases; eliminating; cheeks; lips; tongue
2. Ingesting; aspirating
3. Moisture-free; uncontaminated; optimum
4. Barrier; microbial
5. Prevents; barrier
6. Operative; efficiency
7. Moisture; access; management

LESSON 2

1. E
2. Endodontic; transillumination
3. Contrast
4. Endodontic
5. Medium
6. Tissue retraction; soft
7. Contaminate; separately; non-latex

LESSON 3 - Step 1

1. Isolate; access; visibility

Matching Questions:

Posterior isolation: c

Pediatric dentistry isolation: d

Anterior isolation: b

Single-tooth isolation: a

LESSON 3 - Step 3 Basic Clamps

- 2: Common premolar clamp 8A; 14; 14A:
Partially erupted/irregularly-shaped molars
- 8: Universal maxillary molar clamp

- 7: Large mandibular molars
- 1: Maxillary premolars/deciduous teeth
- 3: Small mandibular molar clamp
- 4: Small maxillary molars/deciduous teeth
- 00: Small premolars, incisors, deciduous teeth
- W56: Universal maxillary/mandibular molar clamp
- 9: Maxillary/mandibular anterior clamp for single tooth isolations
- 12A; 13A: Mandibular/maxillary serrated molar clamps

LESSON 3 - Step 3 Specialty Clamps

- B4: Crown/bridge preparation and cementation
- 212; B5; B6: Gingival retraction Class V restorations
- B5; B6: Designed to allow seating without laceration (lingual jaw more supra-gingival than facial jaw)
- B2: Upper left; B3: Upper right: Paired set of maxillary molar clamps
- B1: Mandibular molar clamp
- B1; B2; B3: May be used for pediatric dentistry applications

LESSON 3 - Step 4

Sequence of dam placement:

1. Determine which teeth to include in isolation.
2. Decide which application technique to use.
3. Prepare dental dam.



4. Secure dam posteriorly with a dental dam retainer.
5. Place napkin and frame.
6. Secure dam anteriorly using WEDJETS® Cord.
7. Use Knifed-Edge Technique to properly align dam between the teeth.
8. Use Loop Technique to pass dam between tight contacts.
9. Invert dental dam

LESSON 3 - Step 5

Dental Dam Removal Sequence:

1. Remove WEDJETS® Cord.
2. Insert finger into buccal vestibule to protect patient's lip.
3. Pull interseptal dam away from patient's soft tissue.
4. Cut interseptal dam.
5. Remove clamp.
6. Remove frame.
7. Check for pieces.
8. Rinse patient's mouth.
9. Wipe patient's face.

LESSON 4

1. Tofflemire retainer; complete
2. E. (all of the above).
3. Dam snagged on clamp; spacing between holes inadequate; no consideration made for malposed teeth.
4. Incorporate two structurally sound teeth on either side of the tooth that is compromised.
5. E. (all of the above).

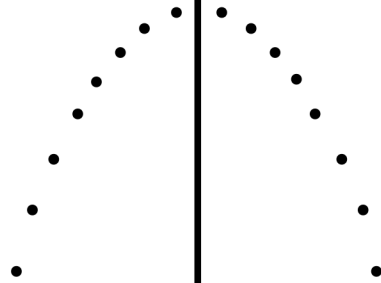


Appendix D

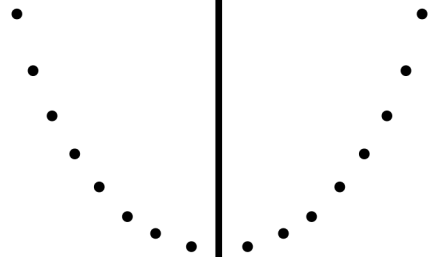
Dental Dam Template (6")

Place dam on top of template: mark with pen.

MAXILLARY



MANDIBULAR



6X6 DAM TEMPLATE

 COLTENE

3-P00162





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Coltène/Whaledent Inc. 
235 Ascot Parkway
Cuyahoga Falls, OH 44223 / USA
Tel. USA & Canada + 1 800 221 3046
+ 1 330 916 8800
Fax +1 330 645 8704
info.us@coltene.com

Coltène/Whaledent AG
Feldwiesenstrasse 20
9450 Altstätten / Switzerland
Tel. +41 (0)71 757 53 00
Fax +41 (0)71 757 53 01
info.ch@coltene.com



Coltène/Whaledent GmbH + Co. KG
Raiffeisenstrasse 30
89129 Langenau / Germany
Tel. +49 (0)7345 805 0
Fax +49 (0)7345 805 201
info.de@coltene.com

coltene.com
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P/N 20004533A