Tissue Management and Gingival Retraction- A Review Of Techniques.

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Abstract:- An acceptable impression must be an exact record of all aspects of the prepared tooth. This means that it must include sufficient unprepared tooth structure immediately adjacent to the margins for the dentist and the laboratory technician to identify the contour of the tooth and all prepared surfaces. The contour of the unprepared tooth structure cervical to the preparation margins is crucial information that must be available when restoration is fabricated in the dental laboratory. If the impression does not reproduce this critical area, where the tooth and future restoration meet, fabricating the restoration with proper contours is not possible. If the restoration is to fit precisely, the cast on which it is made must be as nearly exact duplicate of the prepared tooth in the mouth as possible. Gingival displacement is an important procedure during fabrication of restoration. Both mechanical-chemical and surgical methods can be used to enlarge the sulcus. The most common tech. used is that of retraction cords with haemostatic medicament. The exposure of the preparation margin and the control of the hemorrhage in the gingival sulcus are pre-requisites for prescribed impressions and thereby improving the quality of indirectly fabricated restorations.

Keywords:- Tissue management, Gingival health, Rubber dam, Retraction cords, Rotary methods.

I. INTRODUCTION

The patient's mouth is a challenging environment in which to make an accurate impression, the moisture control is probably one of the most important aspects of successful impression making. Except for the polyethers, all other elastomeric impression materials are hydrophobic. Any moisture results in voids. Consequently, salivary flow into the area must be reduced and diverted to obtain the necessary dry field of operation. Any bleeding must be controlled in order to obtain a successful impression (Rosensteil 4th edition).

When the preparation margins extend subgingivally, the adjacent gingival tissues must be displaced laterally so that a bulk of low-viscosity impression material can be introduced into the widened sulcus and capture the marginal detail (Nemetz 1974 and Nemetz et al., 1984). This may require enlarging the gingival sulcus through mechanical, surgical or chemical means and must be done without jeopardizing periodontal health. A bulk of impression material is required to obtain maximum accuracy and to improve the tear strength of the material so that it can be removed from the mouth intact with no tearing (Laufer et al., 1994 and Donovan 1988). The critical sulcular width in this regard seems to be approximately 0.2 mm. A width of less than 0.2 mm results in impressions that have a higher incidence of voids in the marginal area, an increase in tearing of the impression material, and a reduction in marginal accuracy (Laufer et al., 1996)

Improper tissue management may lead to permanent soft tissue damage. The impression must be free of air bubbles, thin spots, and other imperfection that might produce inaccuracies (Rosensteil 4th edition).

The rationale for tissue management is a critical step of impression making whether the impression is made with a conventional impression material or by a digital impression technique so that all tooth preparation margins are captured in the impression assure an excellent marginal fit of a laboratory fabricated restoration (Strassler 2011). (Rosensteil 4th edition) stated certain factors which affect the outcome of an impression these are:

- 1. <u>Tissue health</u>
- 2. Fluid control
- 3. <u>Finish line exposure</u>

1. Tissue health:

After the teeth are prepared and interim restoration has been made, the health of the surrounding soft tissues must be reevaluated. Periodontal disease must be treated and restored before placement of fixed prosthesis. Quality provisional restorations are essential to establish an improved environment to facilitate oral hygiene procedures to improve and maintain gingival health (Donovan & Cho 1999; Chiche & Harrison 1994). The location of the prepared cervical margin within the sulcus is critical to long-term gingival health and to

impression making. The optimum position of the margin is 0.5 mm from the healthy free gingival margin or 3.0 to 4.0 mm from the crest of the alveolar bone and must follow the natural scalloped form of the attachment and alveolar housing (Block 1987 and kois 1994).

II. Fluid control:

Depending on the location of the preparation in the dental arch several techniques can be used to create the necessary dry field.

Mechanical Methods:

(i) Rubber dam-

The area where only supragingival margins are present, moisture control with rubber dam is most effective method. When used with elastomeric impression material, the dam must be lubricated and clamp must be removed or avoided. It should not be used with polyvinyl siloxane impression material because rubber dam will inhibit its polymerization (chloroplantinic acid catalyst of the PVS materials react with unreacted sulphur present in the rubber dam) (Phatale et al 2010)

(ii) Cotton rolls:

Absorbent cotton rolls are placed in area where saliva pools (in maxillary arch a single cotton roll is used in buccal vestibule and in mandibular arch in lingual sulcus).

When work is being done on a maxillary 2^{nd} or 3^{rd} molar multiple cotton rolls must sometimes be placed immediately buccal to the preparation and slightly anterior to block off the parotid duct which open just anterior to maxillary first molar. if maxillary roll does not stay in position but slips down, it can be retained with a finger or the mouth mirror.

When work is done on mandibular teeth, placement of additional cotton rolls to block off the sublingual and submandibular salivary ducts is usually necessary.

Rolls on the buccal and lingual sides of the prepared teeth help with soft tissue retraction, the cotton roll on buccal side displaces the cheeks laterally and the cotton on lingual side displaces the tongue medially.

(iii) High vaccum:

High volume suction tip is extremely useful during the preparation phase and is most effectively utilized with an assistant when wielded by knowledgeable assistant, it makes an excellent lip retractor while the operator uses a mirror to retract and protect the tongue. Its use is not practiced during the impression or cementation phases.

(iv) Saliva ejector:

It is placed in the corner of mouth opposite the quardent being operated and the patient's head is turned toward it. It can also be used very effectively on the maxillary arch for impressions and cementation simply by adding cotton rolls in the vestibule facial to the teeth being isolated.

It can also be used on mandibular arch while a cotton roll holder position facial and lingual to the teeth.

(v) Svedopter /speejector:

It consist of a metal saliva ejector with attached tongue deflector. The svedopter is most effective when it is used with the patient in nearly upright position. In this position, water and other fluid collect in the floor of mouth , where they are pulled off by the vaccum.

Drawbacks:

1. Access to lingual surface of mandibular teeth is limited.

2. Because the device is made of metal, care must be exercised to avoid bruising the tender tissue in the floor of the mouth by the overzealously clinching down the clamp .

3. Presence of mandibular tori usually precludes its use.

4. Selection of oversized reflector should be avoided, since it could cut into palate above or trigger the gag reflex and in that case the medium size seen to work best in most of mouth.

(vi) Vac-ejector (denta pops aspirator system)

Invented by Ross. W. Anderson in 1995. It consist of Tongue control and high volume evacuator along with bite block that are available in several sizes. It aids in removing large volume of fluids.

(vii) Moisture absorbing cords

Consist of pressed paper wafers covered on one side with a reflective foil. The wafer side is placed facing the tissues and adhere to it and is used along with cotton rolls to control saliva and retract cheek laterally.

(viii) Disposable hygoformic aspirator system

II. CHEMICAL METHODS

(i) Anti sialogogues

Anticholinergics, Antihypertensive and Local anaesthetics. These are used when mechanical methods cannot be achieved. Each of the drugs have side effects which need to be critically evaluated. For the patients who salivate excessively besides mechanical methods some other measures may be necessary. Drugs can be used to control salivary flow:

Methantheline bromide (banthine) and Propantheline bromide (probanthine) have been used for this purpose these are gastrointestinal anticholinergic that act on GI, urinary, biliary tract smooth muscles providing dry mouth as a side effect.

<u>Dosage</u> -50 mg of banthine /15 mg of probanthine taken one hour before the appointment.

Side effects: drowsiness, blurred vision and unpleasant or bitter taste

Contraindications: History of hypersensitivity to drug, glaucoma, asthma, obstructive condition of GI or urinary tracts, congestive heart failure and lactating mothers

Antihypertensives include clonidine hydrochloride(Rosensteil 4th edition). 0.2 mg of this drug is as effective as 50 mg of banthine. It is used as antihypertensive agent and should be used cautiously in patient receiving other antihypertensive medications. Side effects are drowsiness.

Local anaesthetics in addition to pain control normally needed during tissue displacemen help considerably with saliva control during impression making. Nerve impulse from periodontal ligament form part of the mechanism that regulates salivary flow. When these are blocked by anesthetics saliva production is considerably reduced (Tripathi 2008).

III. FINISH LINE EXPOSURE:

The marginal fit of a restoration is essential in preventing recurrent caries and gingival irritation, the finish line of the tooth preparation must be reproduced in the impression. Obtaining a complete impression is complicated when some or all of the preparation finish line lies at or apical to the crest of the free gingival. In such situations, the prepared finish line must be temporarily exposed to ensure reproduction of the entire preparation, control of fluid in sulcus particularly when a hydrophobic impression material is used is also necessary, because liquid can cause an incomplete impression of the critical finish line area (Malone et al., 8th edition).

The procedure used to facilitate effective impression making with intra crevicular margins is gingival "displacement" as opposed to gingival "retraction". The location of the prepared cervical margins within the sulcus is critical to long term gingival health and to impression making . the optimim position of the margin is 0.5mm from the healthy free gingival margin or 3-4 mm from the crest of alveolar bone and must follow the natural scalloped form of the attachment and alveolar housing (Donovan & Chee 2004).

The aim of gingival retraction is to atraumatically allow access for the impression material beyond the abutment margin and to create space in order to provide sufficient thickness of impression material in gingival sulcus region so that it can better withstand the tearing forces encountered during removal of impressions (Phatale et al., 2010).

Techniques for gingival displacement have been classified as mechanical, chemical, surgical, and combinations of the three (Gilboe 1980 and Nemetz & Seilby 1990). The method of gingival displacement used by the majority of practitioners is a combination of mechanical-chemical displacement using gingival retraction cords along with specific hemostatic medicaments (Donovan et al., 1985). Soft tissue laser and surgical methods including rotary gingival curettage and electro-surgery are used as ancillary procedures in conjunction with mechanical-chemical techniques.

Mechanical: Copper tube/band method

A copper band or tube can serve as a means of carrying the impression material as well as a mechanism for displacing the gingiva to insure that the gingival finish line is captured in the impression. One end of the tube is festooned, or trimmed, to follow the profile of the gingival finish line, which, in turn often follows the contours of the free gingival margin.

The tube is filled with modeling compound, and then it is seated carefully in place along the path of insertion of the tooth preparation. It has been used with impression compound and elastomeric materials.

Several types of die material can be used, depending on the material used for the impression. If the impression is made with an elastomeric material, the die can be formed of stone or electroplated metal, if the impression is compound, the die can be made of amalgam or electroplated metal (Phatale 2010).

The use of copper bands can cause incision injuries of gingival tissue, but recession following their use is minimal, ranging from 0.1mm n healthy adolescents to 0.3mm in a general clinic population. Copper bands are especially useful for situation in which several teeth have been prepared. The likelihood of capturing all of the finish lines in one impression decreases as the number of prepared teeth increases.

Rubber dam

A rubber dam also can accomplish the exposure of the finish line needed. Generally it is used when a limited number of teeth in one quadrant are being restored and in situations in which preparations do not have to be extended very far subgingivally. It can be used with modified trays if the bow and wings of the clamp are blocked out.

Plain cotton cords

With the introduction of elastic impression materials, new means had to be used for displacing the gingiva. Plain cotton cord was used for sulcus enlargement, physically pushing away the gingiva from the tooth (Lylajam & Prasanth 2012). Unfortunately, its effectiveness is limited because the use of pressure alone often will not control sulcular hemorrhage. **Chemicomechanical (retraction cord)**



Figure 1- Comparison of Braided (top) and Knitted (bottom) retraction cord

Cords for retraction are available in Knitted, braided and loosely woven absorbent fiber forms. By combining chemical action with pressure packing, enlargement of the gingival sulcus as well as control of fluids seeping from the walls of the gingival sulcus is more readily accomplished. Caustic chemicals such as sulfuric acid, trichloracetic acid, negatol (a 45% condensation product of meta cresol sulfonic acid and formaldehyde), and zinc chloride have been tried in the search for an effective chemical for gingival retraction, but their undesirable effects on the gingiva led to their abandonment.

Over the years, racemic epinephrine has emerged as the most popular chemical for gingival retraction. Surveys published in the 1980s document that cord impregnated with 8% racemic epinephrine is the most commonly used means of producing gingival retraction. Two types of hemostatic agents are commonly used for gingival tissue management are:-

Vasoconstrictors and

Astringents.

Vasoconstrictors shrink the tissue by constricting the lumina of the blood vessels causing a diminishing of the caliber of the vessels with resultant reduction in volume of the local tissue contour. Astringents shrink tissues by reducing the flow of fluid and by the coagulation and precipitation of a thin surface film. Epinephrine produces hemostasis and it causes local vasoconstriction which in turn results in transitory gingival shrinkage. In research conducted on dogs, epinephrine produced slight tissue injury that healed in 6 days to 10 days. A study using human subjects showed that epinephrine cord did not produce significantly greater gingival inflammation than potassium aluminium sulfate or aluminium chloride (Phatale et al., 2010).

However, there is controversy surrounding the use of epinephrine for gingival retraction, and its use is declining, particularly among dentists who have graduated since 1980. Some investigators have found that the physiologic changes that occur when epinephrine-impregnated cord is placed in an intact gingival sulcus are minimal. However, the heart rate increase and the blood pressure elevation are more dramatic when the cord is applied to a severely lacerated gingival sulcus, or when cotton pellets soaked in epinephrine are applied. The use of liquid, epinephrine-containing hemostatic agents is therefore not warranted in this situation; there are effective hemostatic agents without epinephrine available for such use (Baba et al., 2014).

For those patients with cardiovascular disease, hypertension, diabetes, hyperthyroidism, or a known hypersensitivity to epinephrine, a cord impregnated with some other agent must be substituted. Epinephrine also should not be used on patient taking Rauwolfia compounds, ganglionic blockers, or epinephrine-potentiating drugs. Neither should patients taking monoamine oxidase inhibitors for depression receive epinephrine (Shillinburg 5th edition). Aluminium chloride (AlCl₃], alum (aluminium potassium sulfate) [AlK(SO₄)₃] and Ferric sulfate are also used for gingival retraction. Investigators have compared several of these agents with epinephrine for displacement effectiveness, hemostasis and tissue irritation. No significant difference was found in sulcular width around teeth treated with alum and epinephrine impregnated cord before impressions (0.49 mm vs 0.51 mm, respectively).

III. CORD DISPENSING

The shortcoming in cord dispensing and cutting has been addressed with the introduction of an all-inone delivery system that combines convenience, efficiency and effectiveness in gingival retraction cord dispensing and cutting.



Figure 2. Dispensing GingiBRAID+ with ShortCut (DUX Dental) click dial dispensing to length desired with Built-in cutter on ShortCut dispenser to cut to length needed.



Figure 3. Placement of braided cord for retraction for a Class V carious lesion with a smooth, nonserrated cord placement instrument (Fischer UltraPak Packer, Ultradent).

This system, Short- Cut (DUX Dental) dispenses the braided gingival retraction cord (GingiBRAID+) by merely turning the click-stop dial of the ShortCut device the number of clicks specific to the length of cord needed. Typically 3-4 clicks provides a length of braided cord for an anterior tooth; 4-5 clicks for a premolar; and 5-6 clicks for a molar. Once dispensed, the built-in cutteris activated and pushed in with firm pressure, dispensing to the length needed for your clinical procedure.

Which are better, serrated or smooth cordpacker blades?

For braided and twisted cords, both serrated and smooth cord packers work well; for knitted cords, smooth cord-packing instruments are less likely to pull the cord from the sulcus during placement. The use of standard off-angle plastic filling instruments (PFI) is inappropriate due to the thickness of the blade. Recently a novel double-ended instrument with multiple orientations of a dual-packing blade (TN010 Double Cord Packer, Garrison Dental Solutions) has been introduced so that the instrument does not need to be twirled to get the

endorientation needed. Dr. Bob Margeas, designed this instrument because when using magnification this design maintains the instrument in the field of view while packing cord around the tooth (Strassler 2011).

Of importance, when handling gingival retraction cord one should use latex-free gloves. Indirect latex contamination can have an inhibitory effect on the setting of vinyl polysiloxane impressions materials. This is especially critical in the gingival sulcus, where a minimal amount of light body is placed as an incomplete cure may result in gingival tears of the impression materials.

Requirements of gingival retraction

• It should provide maximum exposure of the operating site.

• It should expose the finish line margins of the preparation completely such that it allows the recording of the impression and provides marginal integrity for the restoration.

• It should provide space for sufficient bulk of the impression material so that the impression does not tear on its removal.

• It should permit completion of the preparation and cementation of the restoration (Lylajam & Prasanth 2012).

IV. TECHNIQUES

There are three main variations of the mechanical-chemical technique for gingival displacement. They include the single cord technique, the double cord technique, and the infusion method of gingival displacement (Bensen et al., 1989; Adams 1981 and Bailey & Fischer 1995).

Single-cord technique:

This technique is indicated when retracting the gingiva for obtaining the impression of one or three prepared teeth with healthy gingival tissue, especially when the prepared margins are at or below the gingival tissue. A single cord is placed in the sulcus and removed before taking the impression.

This provides displacement, which is about the width of the cord. In a deep sulcus, the tissue can collapse even over the top of the cord, thereby restricting the access of the impression material into the retracted sulcus. This causes the impression material to tear on removal or since the impression material is very thin in these regions, and it can easily deform.

Double cord technique:

This can be used when single or multiple teeth are prepared. It involves 2 cards, one placed above the other. A thin 00 retraction cord is first packed to control the gingival seepage and hemorrhage. The second large cord is impregnated with a hemostatic agent and placed above the first cord for a minimum of 4 minutes and removed before the impression is made. The advantage of this technique is that the first cord remains in place within the sulcus and thus reduces the tendency of the gingival cuff to recoil and displace the impression material. This approach not only helps control gingival hemorrhage and exudates but also prevents the tearing of the sulcus impression because of inadequate bulk. Another advantage is that the first cord protects the tearing of the gingival epithelium.

V. THE INFUSION TECHNIQUE:

The infusion technique for gingival displacement uses a significantly different approach from the single or double cord technique. After careful preparation of the cervical margins in an intracrevicular position, the hemorrhage is controlled using a specifically designed dentoinfusor with a ferric sulfate medicament, Infusor is used with a burnishing motion in the sulcus and is carried circumferentially 360- around the sulcus . the medicament is extruded from the syringe /infusor as the instrument is manipulated around the gingival sulcus. When hemostasis is verified, a knitted retraction cord is soaked in the ferric sulfate solution and packed into the sulcus. Advocates of this technique recommend leaving the cord in place for 1 to 3 minutes. The cord is removed, the sulcus is rinsed with water and the impression is made.

In the opinion of authors, this technique is effective in achieving hemostasis, but because the cord is left in place only for 1-3 minutes, it may not provide adequate lateral displacement to permit an adequate bulk of the impression materil into the sulcus. It is not recommended that the cord be left in sulcus for longer times because till date histologic data are not available to demonstrate that it is safe to do so.

When using ferric sulfate materials. Patient should be forewarned that the tissues may be temporarily darkened. The tissue takes on a blue black appearance that usually disappears in a few days.

The "every other tooth" technique: When making impression of anterior tooth preparations, it is critical that no damage is done to the gingival tissues that may result in recession. With teeth with root proximity, placing retraction cord simultaneously around all prepared teeth may result in strangulation of the gingival papilla and eventual loss of the papilla. This creates unaesthetic black triangles in the gingival embrasures. This undesirable outcome can be prevented with this technique. This can be used with the single or double cord technique.

• Retraction cord is placed around the most distal prepared tooth.

• No cord is place around the prepared tooth mesial to this tooth.

• Retraction procedures are completed on alternate teeth.

• If for e.g., teeth #5through#12 are prepared, cords will be placed around teeth#5, #7, #9and#11. The impression is made.

• Gingival displacement is accomplished on teeth #6, #8; #10and #12and a second impression is made.

• A subsequent pickup impression allows fabrication of a master cast with dies for all eight prepared teeth.

Retraction Strips

Synthetic retraction materials are chemically extracted from a biocompatible polymer (hydroxylate poly vinyl acetate) that creates net-like strips. The material, which can be easily shaped and adapted into the sulcus without local anesthesia, is slightly effective for the absorption of intraoral fluids, such as saliva, blood, and crevicular fluids. Once inserted around the tooth, the sponge like strips expand with the absorption of fluids and exerts pressure on the gingival tissue to cause displacement (Lylajam & Prasanth 2012).

Cordless retraction

These materials are available in paste-like form and supplied with a specialized dispenser to displace the gingiva when injected into the sulcus. They are less traumatic than the conventional retraction cord and are preferred for gingival displacement in implant prosthesis. They are also used to obtain digital impressions for the CAD-CAM prosthesis.

Retraction paste

A number of retraction pastes with and without hemostatic agents are available. With hemostatic agents. For example:- Kaolin matrix and 15% Alcl3 + 85% fillers (Expasyl), 20% Feso4 (Viscostat dentoinfusor system) Without hemostatic agents. For example:- A variety of poly vinyl siloxanes, which generate hydrogen gas during setting, induce expansion. The material is syringed around the preparation, and a cotton cap placed over it held under biting pressure for 5 minutes. As the patient bites over the cap, the silicon material is pushed into the sulcus. The silicone material foams due to the liberation of hydrogen as the silicon sets and expands in the sulcus producing displacement. The material is removed after 5 minutes (Lyjalam and Prasanth 2012). A histopathological study conclude that Newly Advanced materials in the form of retraction paste like Expasyl (15% Aluminium Chloride), Kaolin, Water & Magic Foam Cord(Polyvinyl siloxane , Addition type silicone elastomer was found to be better than retraction cord as assessed histologically causes less sulcular and junctional epithelium damage (Phatale et al.,2010). The Effect of Gingival Retraction Procedures on Periodontal Indices and Crevicular Fluid Cytokine Levels is also being studied and results concluded that gingival retraction produces an acute injury that heals clinically in 2 weeks as is indicated by the GI. It also provides the first evidence that gingival retraction results in an elevation of the proinflammatory cytokine, TNF- α , in GCF. (Feng et al., 2006)

Surgical methods:

Rotary Curettage:

Rotary curettage is a "troughing" technique, the purpose of which is to produce limited removal of epithelial tissue in the sulcus while a chamfer finish line is being created in tooth structure. The technique, which also has been called "<u>gingettage</u>" is used with the subgingival placement of restoration margins. It has been compared with periodontal curettage, but the rationale for its use is decidedly different. Periodontal curettage is used to debride diseases tissue from the sulcus to allow re-epithelialization and healing.

The removal of epithelium from the sulcus by rotary curettage is accomplished with little detectable trauma to soft tissue, although there is a lessened tactile sense for the dentist. Rotary curettage, however, must be done only on healthy, inflammation-free tissue to avoid the tissue shrinkage that occurs when diseased tissue heals. **Electrosurgery**

There are situations in which it may not be feasible or desirable to manage the gingiva with retraction cord alone. Even if the general condition of the gingiva in a mouth is healthy, areas of inflammation and granulation tissue may be encountered around a given tooth. This can be caused by overhands on previous restoration or by the caries itself. It may have been necessary to place the finish line of the preparation so near the epithelial attachment that it is impossible to retract the gingiva sufficiently to get an adequate impression. In these cases, it may be necessary to use some means other than cord impregnated with chemicals to gain access and stop minor bleeding (Shillinburg 5th edition).

The use of electrosurgery has been recommended for enlargement of the gingival sulcus and control of hemorrhage to facilitate impression making Strictly speaking, electrosurgery cannot stop bleeding once it starts.

If hemorrhage occurs, it first must be controlled with pressure and/or chemicals, and then the vessels can be sealed with a coagulating ball electrode.

Electrosurgery has been described for the removal of irritated tissue that has proliferated over preparation finish lines, and it is commonly used for that purpose. There has been concern expressed about the use of electrosurgery or inflamed tissue, based on an exaggerated response to an electrosurgical procedure. Proximity to bone and lateral heat production may have been responsible for the responses. Bone is very sensitive to heat.

Contraindications:

1. It is contraindicated on or near any patient who has a cardiac pacemaker or delayed healing because of debilitating disease or radiation therapy.

2. It is not suitable on thin attached gingivae (the labial of maxillary canines)

3. It should not be used with metal instruments because contact with these could cause electric shock. (Plastic mirrors and evacuation tubes are available).

4. Profound soft tissue anesthesia is mandatory.

5. A thin wire electrode is best for sulcular enlargement. Gingival contouring is usually done with loop electrode.

VI. CONCLUSION

For all impression procedures, the gingival tissue must be displaced to allow the subgingival finish lines to be registered. There are a variety of techniques and materials that allow the clinician to manage the gingival tissues during restoration and when making an impression. These include gingival retraction cords, chemical reagents, electrosurgery, laser tissue sculpting, copper tube impressions, hydraulic impressions and non-invasive, atraumatic displacement/hemostatic materials. In most cases, gingival retraction cord is the most effective method for retracting tissue to the depth of the sulcus. The other methods have their advantages and indications. In any case, the control of the soft tissue for exposing the margins of the tooth preparation for restoration and impressioning is critical. It would be worthwhile for the clinician to understand all the choices available. Gingival retraction holds an indispensable place during soft tissue management before an impression is made.

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