Gingivectomy and gingivoplasty :

Gingivectomy :to excise the overgrowth side of the gingiva which is a fibrotic in nature(a surgical procedure where a **gingival**pocket is reduced ).and here the gingival pocket is a pseudopocket .

EveryGingivectomywill left us with unsmooth surface, and should followed by procedure called Gingivoplasty.

GV/GP retains its usefulness for localized procedures to correct gingival contour.

2-**Gingivoplasty**: recontouringof gingiva to its original shape to give smooth touch.

\*And every procedure is connected to the other , we should start with gingivctomy and immediately followed by gingivoplasty.

\*Gingivectomy: isparticularlyenhancing by subsequentGingivoplastyduring a certain operation wheregingival pocket depth reduced and the remaining gingiva give a physiological contour.

Gingivectomy/gingivoplasty :

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| --- | --- | --- | --- |
| Indications | Contraindications | advantages | Disadvantages |
| Gingivalenlargment or overgrowth | Narrow or absent attached gingiva;if the attached gingival width is less than normal limit which is 1-3 mm we don’t do gingivectomy in order not to lose the attached gingiva and expose roots and bone | Technically simple and good visual access | Very limited indications |
| Idiopathic gingival fibromatosis | Infrabony pocket ;pocket more than 5 mm ..gingivectomy will lead to bone exposure | Complete pocket elimination | Gross wound postoperative pain |
| Shallow supra bony pockets remove it by scaling and polishing and oral hygiene instruction (brushing, using mouth wash) so this will reduce the pocket , but if there's still resistance to the treatment even if we supplement our treatment with antibiotic and we afraid to proceed to deeper pocket 🡪 remove pocket by Gingivectomy. | Thickening of marginal alveolar bone In this case we don't do Gingivectomyto prevent bone exposure, instead we raise a flap then doing osteoplasty to smooth the excess and do contouring with the adjacent bone then close the flap. | Predictable morphological results .Why predictable?Because we can measure it visually or by approach the excessive gingiva and remove it | Danger of exposing bone |
| Areas with difficult access : like areas with caries (minor cavities) and there's teeth are overlapping these areas we do gingivectomy instead of extracting the tooth or doing a flap. |  |  | Loss of attached gingiva |
|  |  |  | Expose the cervical area of the tooth |
|  |  |  | Phonotics and esthetic problems in the anterior areas |
|  |  |  |  |

Notes regarding the table :

In case of gingival enlargement it might be either induced by plaque or could be due to medications (phenytoin, cyclosporine and adalat-nifedipine(channel blockers))…

Gingival enlargement should be treated 1st by scaling and polishing ..oral hygiene instructions the patient should be returned after 2 weeks ..little enlargement will still be evident but we removed the cofactor which is inflammation that is caused by bacteria . Gingival enlargement not usually long standing, it may cause of plaque induce inflammation that convert the gingiva from resilient to fibrotic in nature.

Principles of the procedure (gingivectomy): A) Continue incision of 45 degree angle of the blade at the base of the pocket. (toward the pocket not the tooth).

B) Sharp dissection tissue.

C) Smoothing of the incision edge.

D) Contouring the gingival surface(GP).

E) Scaling and root planning (certainly when removing gingiva we will find long standing calculus or black calculus🡪 black because it derived from the blood).-->so we do polishing and root planning

f)wound coverage ,if we expose cervical margins then coverage with periodontal dressing such as zone or parricade)

- done by Instruments (machine)or by knife or by open a flap or it can be by laser also.

**Periodontal dressing (wound coverage)** Dressing doesn't repair or heal of the tissue , it just covers the gross wound to reduce the exposure to the oral environment and this increases healing , and if not dressed this lead to retardation in healing and bring make the healing back to fibrotic in nature (scar tissue).

**-Ex of periodontal dressing (wound coverage):**

1-Coe-Pak.

2- Zinc oxide non-eugenol(Catalyst and base)

3- Alginate (normal or fast setting)

4-Chlorhexidine gluconate or acetate powder (antiseptic material): we use it to enhance or disinfect the wound area; we can impregnate Chlorhexidine into the dressing material then place it.(It optional but it give more value)

5- Syanoaccrylate periodontal dressing: give 100% of tissue healing completely,and it's expensive.

6- Eye ointment (put it on the tissue and over it place the dressing,thiswill disinfect the area).--> Not available anymore

-We place the dressing after drying the area (we roll the dressing like a cotton roll and place it on the area where we did Gingivectomy🡪it has a mechanical bond "lock")

**\*Why mechanical?**

Because we put the dressing roll then push it interdentally and give us a dovetail shape like.

How long do we keep the dressing ?

Depends on how long the wound takes time to have good healing ; The healing takes 1 week so we leave the dressing for 1 week.

\*Removing the dressing by the tweezer or the tip of the probe, and then do polishing.

How to measure the amount of gingival that needs to be excised ?we should measure the depth of the pocket to know from where to cut, so there's a **Puncturing tweezer it** has two sides one of them is graded in millimeter which is like the probe we inserted in the sulcus (to the maximum depth of the pocket), and the other side is needle like (sharp edge) to punch the labial surface when we reach the maximum depth of the pocket- to mark the outline of the surgical procedure ,we will have multiple lines or dots of bleeding points to help us to dissect the excess tissue.

**-To do dissection we have two types of cutting instruments:**

1-**Kirkland Knife:**has left and right, upper and lower sides to give us the 45 degree to place on the gingiva. We use it by dissecting the tissue from outside to the base of the pocket.

2-**Hairbinknife**(like arrow or sickle)we use it by insert it in the interdental area and this instrument has double cutting edges left and right so we can release the entire tissue

**Electro-surgery unit instrument**: it cuts and clot, so there's no bleeding if we use it at the required temperature.Temperature depends on the thickness of the tissue.

-This unit is generating heat and has a two tips (one is round and the other is contra-angle like triangle in shape. the triangle tip work as the Hairbin knife to smooth or cut the interdental papillae.

Example of a gingivectomy case :

Infiltration> measurement of pseudopocket by the periodontal probe> puncturing , so we will have series of bleeding points (predictable morphological outcome> then we place the Hairbin knife 45 degree to the tissue by following the sequence of bleeding points in one shot from one side to the other until complete the dissection.

**Gingivoplasty:**

Called sweeping, to sweep (smooth) the side from one side to the other to give a uniform surface, and if we stop at the middle we will burn the area, there will be depression and deformity.

-So we bring the Hairbin knife and scrape the burned area.

**Minor corrective procedures:**

If there are two overlapping teeth, we remove a little bit from the interdental papillae so we can access the entire cavity.