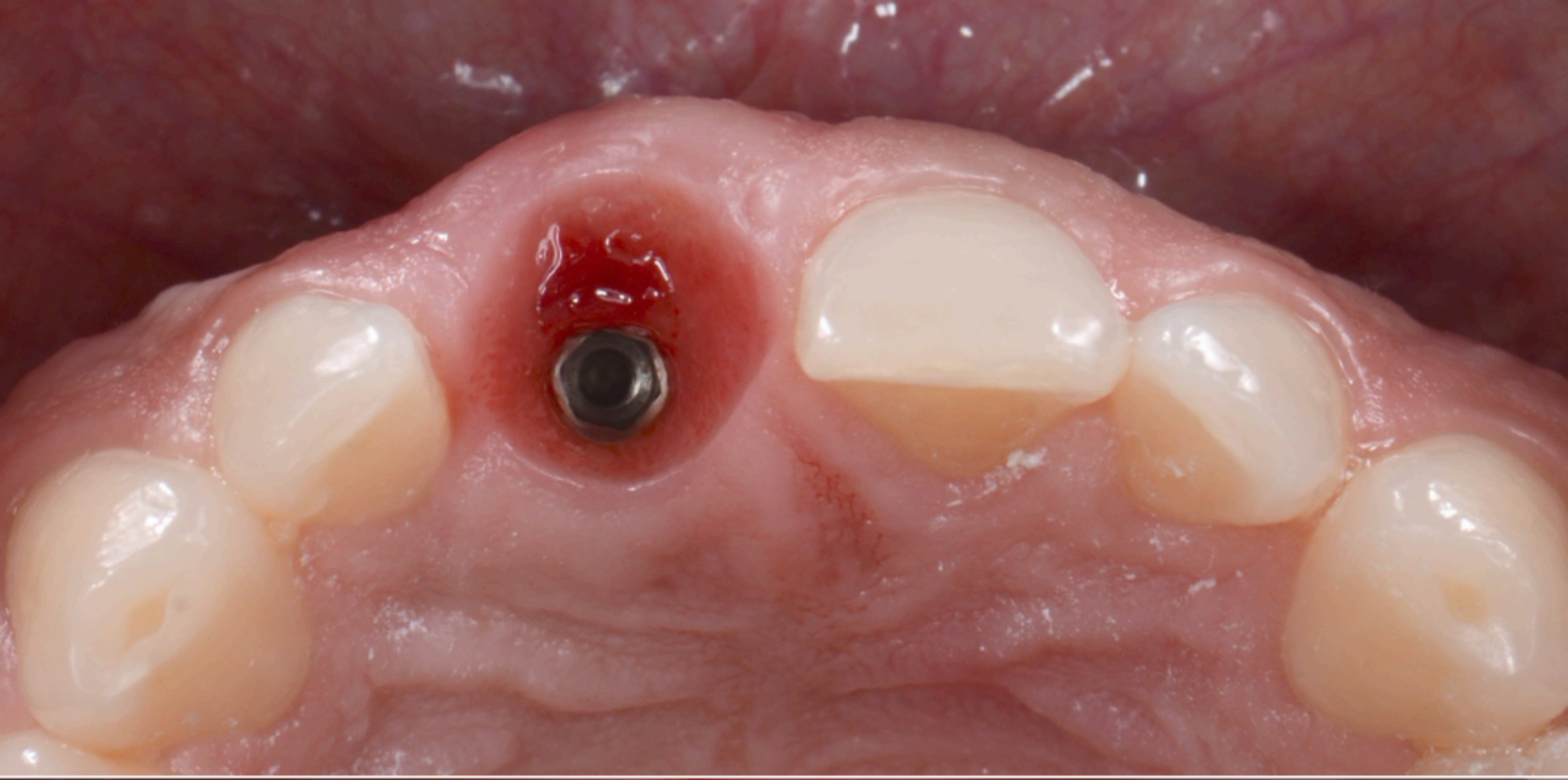

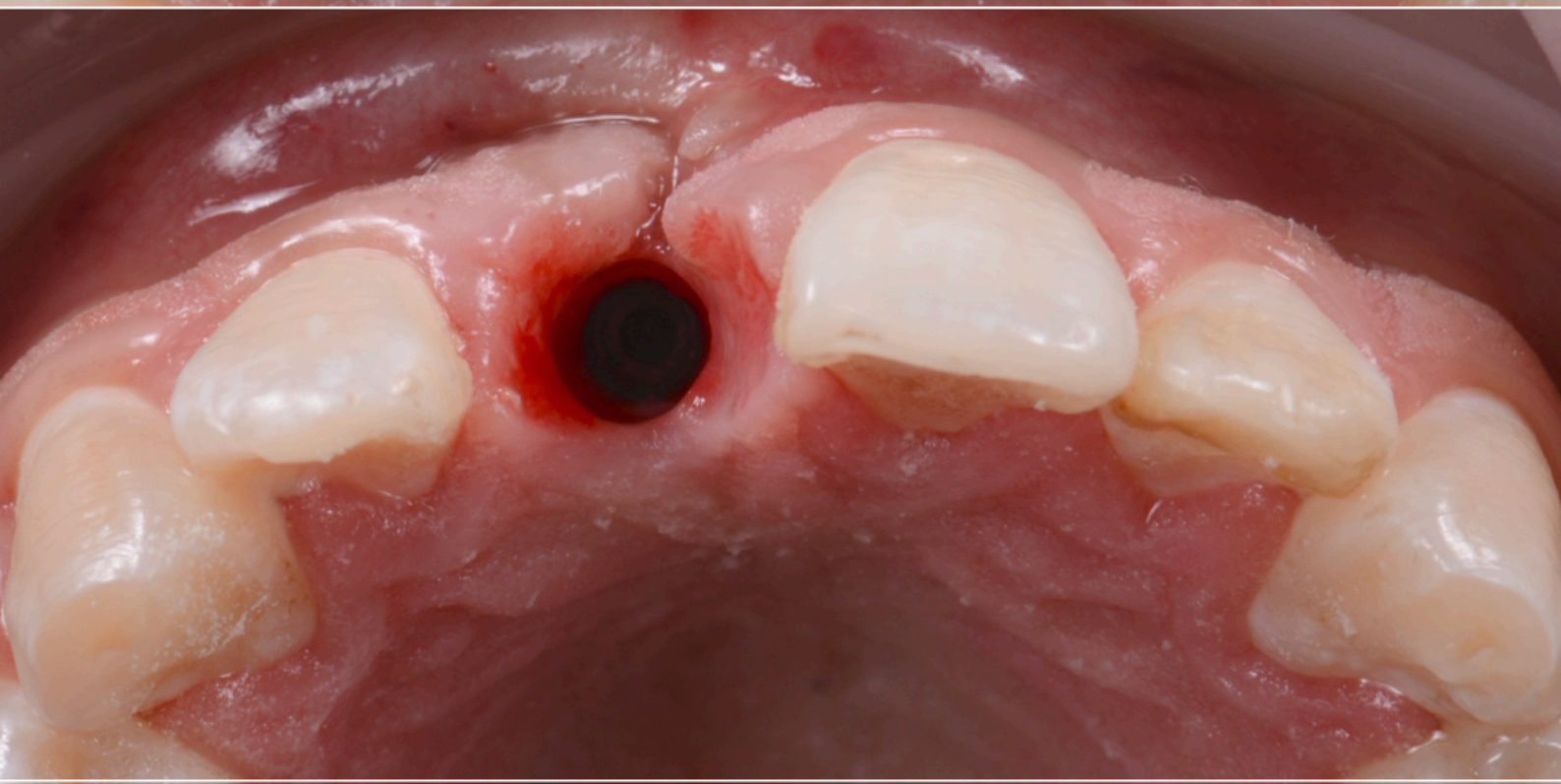

Quick Guide for Decision Making Process in Implant Dentistry

-Esthetic Zone

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Introduction

As we all know, implant placement for aesthetic reasons is one of the greatest challenges facing implantology today, especially in cases with a high upper lip line or gummy smiles, thin biotypes, and young age.

Ensuring the long-term stability of the original architecture will depend on many factors, and we will explain the most important ones here based on my professional experience and protocols developed, prioritizing scientific literature and biological resources above any style.

Depending on many variables, we will need a practical and predictable guide to know what to do in each scenario. That's why I've prepared this Decision-Making Table, so that you can be 100% predictable as long as you follow the steps I indicate and execute the treatment correctly.

Using the following table, we will analyze:

- Clinical situation and scenario.
- Treatment in a single surgical procedure.
- Treatment in two surgical procedures.
- Treatment in three surgical procedures.

The patient's medical and clinical status, as well as the reason for the loss, will be the first indicators of our diagnosis and treatment plan.

Among the many situations that can arise when receiving a patient who requests treatment either due to an emergency (accidental trauma/periodontal deterioration) or due to necessity (previous tooth loss), we will classify the situations as follows:

A. Accidental trauma with a poor prognosis for the tooth present in the mouth: Those whose rehabilitative treatment does not guarantee medium- to long-term stability. For example: Vertical or horizontal subcrestal fracture invading the biological space.

B. Periodontal deterioration with acute or chronic pathology of the tooth showing loss of surrounding bone, with or without affecting neighboring teeth or bone support.

C. Bone crest remodeled due to previous loss of the tooth with mild, moderate, or severe alveolar atrophy depending on several factors, such as:

- Long-term alveolar atrophy since its absence.
- Traumatic extraction sacrificing bone slabs.
- Periodontal disease progressing until its loss, showing a residual atrophic process.

We will also divide the different scenarios into whether the tooth has periodontal involvement with mobility or not, as well as the presence or absence of interproximal bone, which is crucial when predicting the presence or absence of papillae later on.

Based on these different parameters, we will develop our treatment plan, which will guide your surgical rehabilitation following the most predictable steps based on several factors:

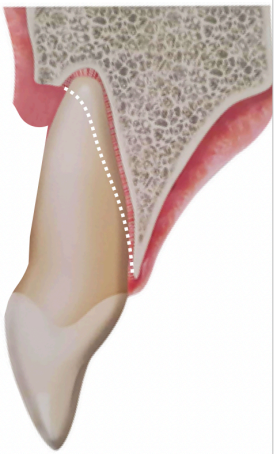
- Regenerative potential.
- Minimal trauma and reduced number of surgeries whenever possible.
- Patient's medical condition.
- Predict clinical and surgical outcomes based on each situation.

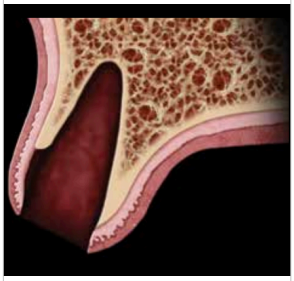
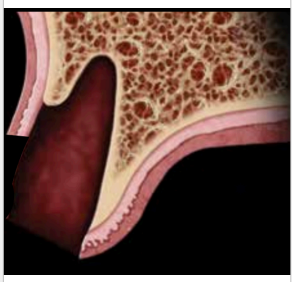
All of these guidelines are intended to avoid unnecessary risks by following a style, fashion, or trend, and instead to respect biology, which in many cases will respond differently depending on the patient.

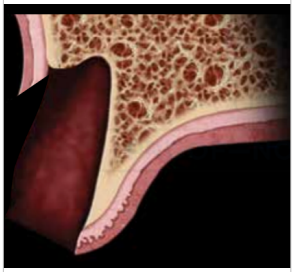
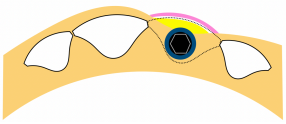
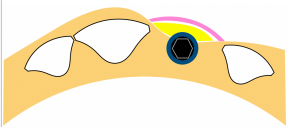
That's why we must be clear about the limitations of each situation and assess the potential risks before making a decision.

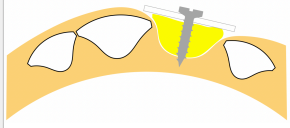
Here's the Decision-Making Table for you to consult with each case that comes your way.

STATUS	ONE SURGERY	2ND SURGERY	3RD SURGERY	SCENARIO
TOOTH Type I Socket Presence of a tooth with intact vestibular plate and interproximal bone, as well as intact soft tissue.	- Extraction. - Immediate implant placement. - Immediate loading. - Connective tissue graft.	NO	NO	
TOOTH: Type II Socket Presence of a tooth with partial absence of the buccal plate (slightly 2-3 mm) and intact interproximal bone and soft tissue. **IMPORTANT**: Classify Type II sockets A, B, and C according to the degree of loss of the V plate.	Depending on the degree of the defect, the following will be performed: - Flapless surgery in cases of mild bone defects for implant placement. - Connective tissue grafting. - Immediate loading based on the biotype and degree of the defect, as well as primary stability and patient profile. - Socket Preservation	- Early loading option (6-8 weeks) to begin soft tissue manipulation through implant-supported provisionals.	NO	

STATUS	ONE SURGERY	2ND SURGERY	3RD SURGERY	SCENARIO
TOOTH Type III socket Presence of a tooth with an absent vestibular plate and a lack of soft tissue and intact interproximal bone.	- Tooth extraction.	- Early implant placement (4-6 weeks) after epithelialization. - Guided Bone Regeneration immediately after implant placement based on the degree of bone atrophy and immediate or delayed connective tissue grafting.	- Possible delayed connective tissue grafting depending on the degree of regenerated defect. (6-8 weeks after implant placement) with provisional delayed loading. *Possible provisional delayed loading 4 weeks after connective tissue grafting.	
TOOTH Type IV socket **Presence of a tooth with a severely absent vestibular plate and absence of soft tissue and affected interproximal bone.**	- Tooth extraction.	- 4 to 6 weeks for epithelialization. - Guided bone regeneration with biomaterials, preferably a mix of allograft-xenograft-autogenous grafts to restore lost alveolar support. - Use of PRGF (GF) in extreme cases such as this one, as well as EMDOGAIN for adjacent periodontal reconstruction.	- Implant placement with immediate loading based on the degree of primary implant stability and patient profile, or delayed loading in cases of minimal ISQ values (<60). - Connective tissue grafting. PROSTHETIC MANAGEMENT: Modification of the provisional restoration based on the migration of the peri-implant gingival margin.	

STATUS	ONE SURGERY	2ND SURGERY	3RD SURGERY	SCENARIO
PERIODONTAL PROGNOSIS Presence of a periodontally compromised tooth, partial Buccal Wall, intact soft tissue and interproximal bone. **IMPORTANT**: Classify type II socket A, B, and C according to the degree of Buccal Wall loss.	- Tooth extraction. - Implant placement. - Immediate loading* - Connective tissue graft*	- Possible delayed connective tissue grafting depending on the case* **PROSTHETIC MANAGEMENT**: Modification of the provisional restoration based on the migration of the peri-implant gingival margin.	NO	
PERIODONTAL PROGNOSIS Presence of a periodontally compromised tooth, absence of soft tissue, and Buccal Wall. Intact interproximal bone	- Tooth extraction.	- Early implant placement (4-6 weeks) after epithelialization. - Immediate GBR after implant placement and immediate or delayed connective tissue grafting depending on the level of atrophy.	- Delayed connective tissue grafting depending on the degree of regenerated defect. (6-8 weeks after implant placement) with provisional delayed loading. Provisional delayed loading possible 4 weeks after the connective tissue graft.	

STATUS	ONE SURGERY	2ND SURGERY	3RD SURGERY	SCENARIO
PERIODONTAL PROGNOSIS Presence of a tooth with periodontal disease, absence of soft tissue, and Table V. Affected interproximal bone.	- Tooth extraction.	- 4 to 6 weeks for epithelialization. - Guided bone regeneration with biomaterials, preferably a mix of allograft-xenograft-autogenous grafts to restore lost alveolar support. - Use of PRGF (GF) in extreme cases like this one, as well as EMDOGAIN for periodontal reconstruction.	- Implant placement with immediate loading based on the degree of primary implant stability and patient profile, or delayed loading in cases of minimal ISQ values (<60). - Connective tissue grafting. **PROSTHETIC MANAGEMENT:** Modification of the provisional restoration based on the migration of the peri-implant gingival margin.	
MILD ATROPHY Loss of 1-2 mm in the bucco-palatine direction (Seibert I)	-Implant placement. -Immediate loading. -Immediate or delayed connective tissue grafting depending on the ROG performed.	-Possible deferred connective tissue graft depending on the case*	**PROSTHETIC MANAGEMENT**: Modification of the provisional restoration based on migration of the peri-implant gingival margin.	
MODERATE ATROPHY Loss of 3-4 mm in the bucco-palatine direction. (Seibert II)	-Implant placement. -GBR -Connective tissue graft*	-Early loading (6-8 weeks) to begin soft tissue manipulation using provisionals.	**PROSTHETIC MANAGEMENT**: Modification of the provisional restoration based on migration of the peri-implant gingival margin.	

STATUS	ONE SURGERY	2ND SURGERY	3RD SURGERY	SCENARIO
SEVERE ATROPHY Loss of more than 4 mm in the buccopalatal and apicocoronal directions. (Seibert III) **INDICATION** Free gingival graft 2 months prior to regeneration surgery to increase the amount of attached/keratinized gingiva and restore the mucogingival line.	-GBR. -Block graft. -Cortical and autologous Khoury Technique graft. Etc…	-Implant placement at 4-6 months. -Connective tissue graft.	-Delayed loading after 3 months of installation to ensure optimal Secondary Stability values.	

*GBR: Guided Bone Regeneration
*PRGF: Plasma Rich in Growth Factors.
*GF: Growth Factors

Additional factors to consider:

1. It is assumed that in cases with severe lower crowding with an increased overbite, periodontally compromised and uncooperative patients, as well as heavy smokers, immunosuppressed patients, and adverse occlusal conditions, the outcome will be compromised if the patient is not properly selected for dental implants or immediate loading is not performed in those selected as suitable.

2. It is also assumed that in all cases of extraction and immediate placement, the vestibular gap will be filled with biomaterial selected by the professional based on the biological properties of the graft to be used and the clinician's surgical intention.

3. In cases where immediate loading is not possible, a Maryland-type fixed provisionalization can be performed to avoid micro-movement of the provisional. Pontic contact with the soft tissues will be maintained throughout the healing process to generate a guide for tissue stimulation and support. The same will apply to the papillae area.

4. Immediate or delayed loading would depend on the degree of implant stability present at the time. Values greater than 60 indicate a better prognosis and a lower likelihood of early failure with subsequent fibrointegration. We will ensure complete absence of occlusal contact with the antagonist during centric and lateral movements.5. The use of immediate or delayed connective tissue grafting will also depend on the lack of connective tissue in the recipient area, the patient's biotype, and the degree of simultaneous regeneration. In cases of extensive regeneration, connective tissue grafting may be postponed to a second approach.

6. Tunneling of the cervical margin in these cases of immediate extraction and implant placement would be limited to mild defect levels, since those caused by trauma with subsequent moderate or severe greenstick dehiscence, with irregular sharp edges, the presence of extensive granulation tissue that is very difficult to remove and detach, and the risk of maintaining periosteal adhesion residues on the surface of the area to be regenerated could lead to potential encapsulation of our particles with the resulting partial or total loss of our vestibular graft.