

DECISION MAKING PROCESS IN POST EXTRACTION THERAPY

Today, post-extraction theraspy has changed the way we rehabilitate our patients' mouths, including immediate loading, simultaneous regeneration and a wide range of benefits for our patients.

The reality is that sometimes the decision-making does not only depend on us but also on the patient's financial possibilities, which makes our final result less predictable.

The important thing at this point is to know what the limitations, expectations and risk/benefit are of doing what can be done and not what should be done due to all these variables.

That is why I want to share with you the decision-making process in those cases in which we do not want to lose the bone crest because the patient cannot have an immediate implant placed at that time and we are going to perform the single extraction.

Here I present a Table in which I indicate whether it is advisable or not according to the scientific literature to perform the socket preservation by placing biomaterial in the alveolus with the aim of not losing volume and original architecture.

This table will indicate in all cases:

- 1. Remaining Socket Walls: External, Internal, Presence or absence of interradicular septum
- 2. Their condition: Thick, thin and absent.
- 3. Soft tissue: Present or absent
- 4. Periodontal condition of the tooth to be extracted.

Variable	Condition	Recommendation for Socket Preservation with Biomaterial	Comments
Buccal plate	Present and thick (>2 mm)	Not essential	If the patient has a favorable gingival biotype and good conditions, biomaterial may not be necessary, but monitoring is advised.
	Present but thin (<2 mm)	Recommended	Thin buccal plates have a high risk of resorption. Biomaterial helps preserve volume.
	Absent	Highly recommended	Without a buccal plate, significant bone loss is expected. Biomaterial is crucial to prevent severe defects.
Lingual/palatal plate	Present and thick (>2 mm)	Not essential	If stable, socket preservation may not be necessary unless other critical factors are present.
	Present but thin (<2 mm)	Recommended	Prevents internal collapse of the socket and facilitates future regeneration.
	Absent	Highly recommended	Absence of the plate compromises bone architecture. Biomaterial is essential to maintain volume.

Interradicular septum	Complete	Optional	If robust, the septum may provide structural support without biomaterial.
	Partial	Recommended	Preservation compensates for the partial deficiency of the septum.
	Absent	Highly recommended	Without the septum, the socket loses structural support. Biomaterial is crucial.
Soft tissue	Present and good quality	Optional	A good gingival biotype may partially compensate for the absence of biomaterial in less compromised cases.
	Present but poor quality	Recommended	Poor-quality soft tissue can exacerbate bone resorption. Biomaterial helps mitigate this.
	Absent	Highly recommended. Extraction alone and 3 weeks of healing before reentry and SP	Absence of soft tissue leaves the socket exposed and at higher risk of resorption.

Periodontal status of the tooth	Healthy	Not essential	Teeth with good periodontal support may not require preservation unless other variables indicate it.
	Moderate periodontit is	Recommended	Moderate bone loss may compromise the stability of a future implant. Biomaterial helps prevent further bone loss.
	Severe periodontit is	Highly recommended	Severe periodontal destruction affects residual bone quality and volume. Biomaterial is crucial for successful future implant placement.
Aesthetic zone vs. posterior region	Aesthetic zone	Highly recommended	Volume preservation is critical in the aesthetic zone to maintain soft tissue contours and prevent visible defects in future restoration.
	Posterior region	Recommended (case-dependent)	While less critical for aesthetics, preserving bone in the posterior region ensures proper support for future implants and prevents vertical bone loss over time.
General considerations	Active infection present	Not recommended until infection is controlled	Prioritize infection treatment before socket preservation.

Defects in multiple walls	Highly recommended	In combined defects, preserving the socket is essential to prevent total collapse.
Patient is a smoker	Recommended, with caution	Although biomaterial helps, smoking can compromise outcomes. Educate the patient on the importance of quitting to improve success rates.

Notes on the aesthetic zone vs. posterior region:

- **Aesthetic zone**: Preservation is crucial to avoid volume collapse and soft tissue recession that can impact prosthetic outcomes and patient satisfaction. Use a combination of biomaterial and a resorbable membrane for optimal results.
- Posterior region: Prioritize structural integrity and functional restoration. A more
 conservative approach may be acceptable if financial constraints are a concern and the
 defect is minimal.