selemental®

Surgical guidelines for extraction sockets with intact and thin (<1.0 mm) buccal walls.

Guidelines written & validated in cooperation with Dr. Minas Leventis, DDS, MSc, PhD.

Introduction

Elemental Oral Surgical Granulate is a smart polymer designed to be more practical and more effective than traditional techniques for covering grafted extraction sockets. Its innovative mechanical, antibacterial and biomimetic characteristics remove the need for collagen plugs and barrier membranes while enhancing and accelerating the healing.

Guidelines

- Perform a minimally invasive extraction. Meticulous degranulation, curettage and disinfection of the socket are essential.
- It is crucial not to overfill the site with grafting material. The bone graft should be gently condensed into the socket up to the level of the bone crest or preferably 1 mm below it. There is no need to use a collagen plug or a barrier membrane over the graft. Avoid suturing at this stage if possible.



🔹 elemental°

- Use latex gloves to mix and apply the Elemental polymer. When in a soft moldable state, the polymer might adhere to nitrile gloves.
- Use boiling water or sterile saline. Cooler water may result in shortened working time, and the polymer may set quickly in the mouth.

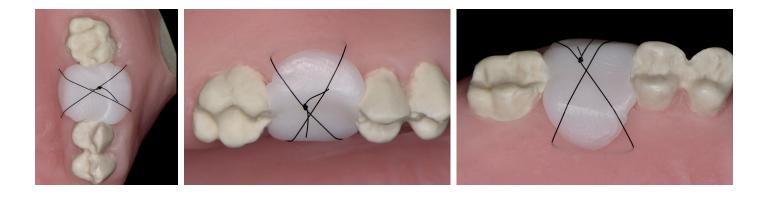


• Using your fingers and light tactile pressure, a small amount of soft polymer is needed to form a thin layer over the grafted socket, adapting to the anatomy of the site. With light compression by your fingers, try to mould the soft polymer under the curvature of the adjacent teeth to achieve improved mechanical stability. The margins of the polymer should extend 2-3 mm over the buccal and palatal\lingual soft tissues.



selemental°

- The polymer will set hard *in situ* in a few minutes. Don't remove the polymerdressing when it's still soft. To accelerate the setting, irrigate the polymer with room-temperature or cold sterile saline.
- When set hard, the polymer dressing can be removed and trimmed with scissors if needed.
- If you're not pleased with the outcome of the polymer after setting, it can be placed back into hot water / hot sterile saline. The material will become soft again and remoldable.
- To stabilize the Elemental polymer dressing over the grafted socket, apply the crisscross suture technique using a high tensile 4-0 PTFE or polyamide suture. Suturing through the Elemental polymer is possible when the polymer is thin. However, this is not necessary, especially in single-tooth sites with present adjacent teeth.



selemental[®]

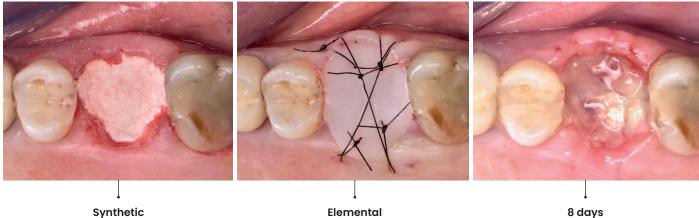
• The Elemental polymer dressing can be removed as soon as 3–8 days post-op, depending mostly on the dimensions of the site. In most cases, this period of time is sufficient for the grated site to be fully covered by newly-formed granulation tissue and the grafting material to be embedded into the fibrin network of the stable coagulum.



Allogenic cancellous bone

Elemental polymer dressing

3 days post-operative



bone substitute

polymer dressing

post-operative

Patient instructions

• Patients should be instructed to refrain from brushing in the area or biting hard food during the first 7-10 days post-op.