

Figure 3: Surgical technique  
Pick up the membrane pins using the straight applicator

## SAFETY

The bioresorbable Leadfix – augmentation system is the answer to successful therapy

No micro-movement of the membrane

Simple, straightforward procedure

No need for a second explantation procedure and therefore no damage to newly formed structures

The membrane pin cannot be accidentally swallowed

Safe resorption of polylactide confirmed in clinical studies and histological examinations

## APPLICATION / HANDLING TECHNIQUE

Leadfix pins should only be used with the Leadfix instruments developed specifically for this purpose.

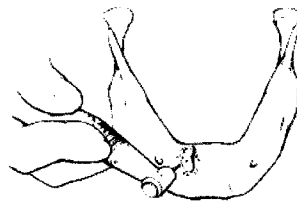


Figure 4: Perforation of the buccal corticalis

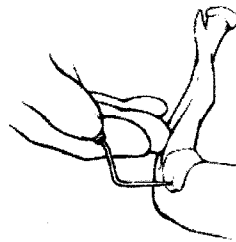


Figure 5: Use the probe with soft membranes

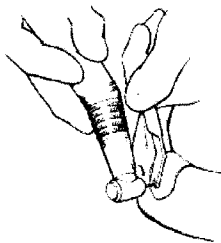


Figure 6: Use the drilling and positioning guide on hard membranes

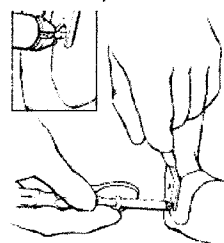


Figure 7: Inserting the membrane pins

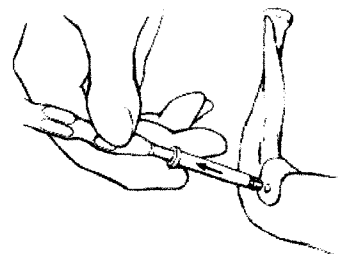


Figure 8: Removing the applicator

## REDUCTION IN PIN STRENGTH AND DEGRADATION

After 6 - 7 months the mechanical strength of the Leadfix pin decreases. A process then begins, whereby resorption sets in and the volume of the pin is reduced. Pin degradation by hydrolysis leads to lactic acid formation. Lactic acid is metabolized to CO<sub>2</sub> and H<sub>2</sub>O in the citrate cycle. The material is fully resorbed after 60 weeks

**INNOVATION.** The clinical use of resorbable membranes for guided bone regeneration constitutes a new approach in dental surgery. Leadfix is a bioresorbable augmentation system used to fix membranes in position.

**STABILITY.** Total membrane stability is an important pre-requisite for successful, guided bone regeneration. Application of the Leadfix-augmentation system prevents any relative movement between the membrane and surrounding bone or membrane and mucoperiostal flaps. It ensures an intact seal and smooth transition to the periosteum. The membrane becomes securely fixed in position over several months.

**SYSTEM.** The Leadfix-membrane pin is a bioresorbable pin that is inserted into the bone. It is used to fix membranes in place at the respective implantation sites.

**THE MEMBRANE PIN COMPRISES** osteosynthetic implant material and has proved to be an effective suture material. Biological degradation occurs through hydrolysis to lactic acid, which is subsequently metabolised to CO<sup>2</sup> and H<sup>2</sup>O.

**THE DESIGN OF THE PIN** ensures rapid, straightforward application and the long-term secure positioning of the pin throughout its lifespan.

**WITH A SHAFT DIAMETER** of < 1 mm, the membrane pin is an ideal material for secure fixing in surrounding bone. The retention ridges on the shaft allow the membrane pin to sit firmly in the implantation site. Thanks to the smooth, lens-shaped head, the pin can be inserted simply using specially developed Leadfix instruments.

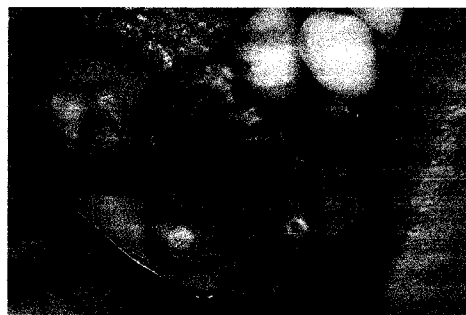


Figure 1: Lead Fix Pin in use during dental surgery



Figure 2: Fixation of a membrane with degradable pins