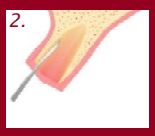
The Cytoplast® Technique™:

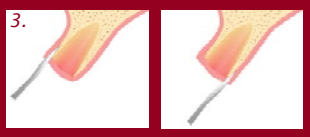
Cosmetic Socket Preservation Without Primary Closure



1. Preoperative view. To maximize the result of ridge preservation procedures, techniques designed to minimize trauma to the alveolar bone, such as the use of periotomes and surgical sectioning of ankylosed roots should be considered.



2. All soft tissue remnants should be removed with sharp curettage. Special care should be taken to remove all soft tissue at the apical extent of the socket of endodontically treated teeth. Bleeding points should be noted on the cortical plate. If necessary, decortication of the socket wall should be done with a #2 round burr to improve blood supply.



3. A subperiosteal pocket is created with a micro periosteal elevator or small curette, extending 3-5 mm beyond the socket margins on the palatal and the facial aspect of the socket. In the esthetic zone, rather than incising and elevating the interdental papilla, it is left intact and undermined in a similar fashion. The Cytoplast® high-density PTFE membrane will be tucked into this subperiosteal pocket.



4. Particulate graft material can be placed into the socket with a syringe or with a curette. Ensure that the material is evenly distributed throughout the socket. However, the particles should not be densely packed to preserve ample space for blood vessel ingrowth.



5. The Cytoplast® high-density PTFE membrane is trimmed to extend 3-5 mm beyond the socket walls and then tucked subperiosteally under the palatal flap, the facial flap and underneath the interdental papilla with a curette. The membrane should rest on bone 360˚ around the socket margins, if possible. Note that minimal flap reflection is necessary to stabilize the membrane.



6. Ensure that there are no folds or wrinkles in the membrane and that it lies passively over the socket. To prevent bacterial leakage under the membrane, take care to avoid puncturing the membrane, and do not overlap two adjacent pieces of membrane material.



7. The membrane is further stabilized with a criss-cross Cytoplast® PTFE suture. Alternatively, interrupted sutures may be placed. The PTFE sutures, which cause minimal inflammatory response, are left in place for 10 to 14 days.



8. The membrane is removed, non-surgically, in 21 to 28 days. Sockets with missing walls may benefit from the longer time frame. Topical anesthetic is applied, then the membrane is grasped with a tissue forcep and removed with a gentle tug.



9. Studies have shown that by 21-28 days there is a dense, vascular connective tissue matrix in the socket and early osteogenesis is observed in the apical 2/3 of the socket.



10. Immediately following membrane removal, a dense, highly vascular, osteoid matrix is observed. The natural position of the gingival margin has been left intact because primary closure was not necessary. The dense PTFE membrane has contained the graft material and prevented epithelial migration into the socket.



11. The socket at 6 weeks. Keratinized gingiva is beginning to form over the grafted socket. The natural soft tissue architecture is preserved, including the interdental papillae. New bone is beginning to form in the socket. Over the next 6 to 10 weeks, increasing thickness of trabeculae and mineralization will result in load bearing bone suitable for implant placement.

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