



Socket Healing - The First Step in Esthetic Dentistry Following Extraction

By Eiji Kato, DDS



When a dentist extracts a tooth, they are already thinking about how to restore it. The dentist would like the extraction socket to heal quickly for the purpose of planning a cosmetically pleasing restoration.

If a maxillary anterior tooth with a labial dehiscence or fenestration is extracted, rapid bone loss is expected because of the thin or missing alveolar bone. In the case of this type of extraction, there have been many ways to restore the tooth with a pontic on a fixed bridge or with a false tooth attached to a removable partial denture. Implants have also been a method by which extracted teeth have been restored.

The criteria for what type of material will be used is dependent on how many walls remain in the bony defect, the size of the mesial-distal or palatal-labial defect, and how much soft tissue remains. Foundation, a collagen-based, bone filling augmentation material, is frequently used for many cases.

Foundation is most effective when four walls remain with at least 2mm of bone on the labial side, but it is still effective in more advanced defects.

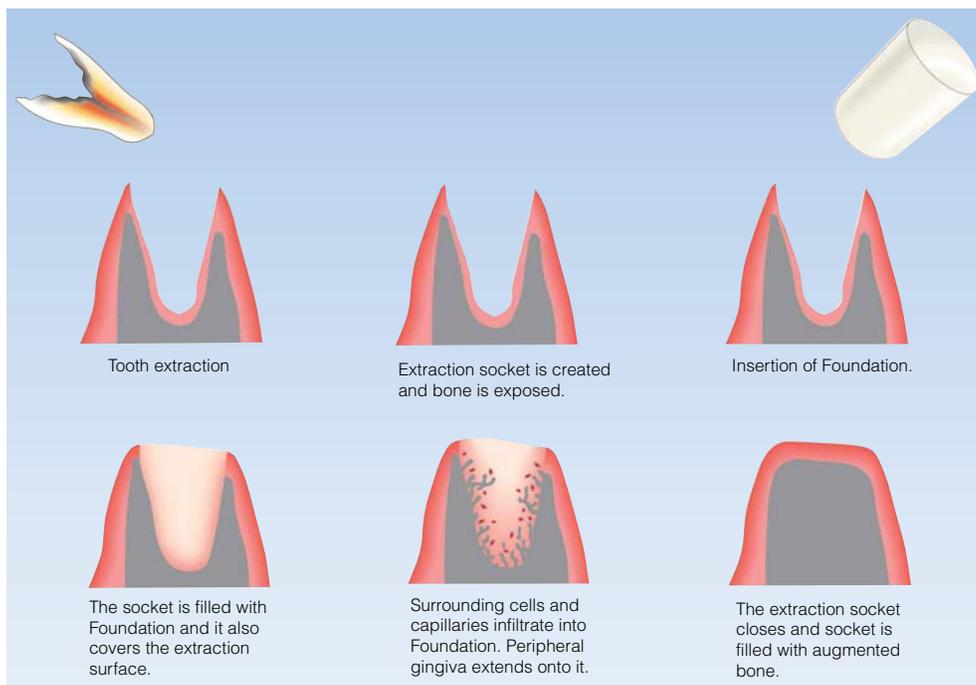
Another indication for Foundation is in immediate implant surgery. The material has been used to fill the space between implant and soft tissue to “pump up” the soft tissue and support the implant.

Foundation was originally used as a scaffolding or framework to absorb blood in the extraction socket. The design of the collagen in Foundation also contains a portion that stimulates the bone to grow into the scaffolding, filling the socket with the patients own bone.

Clinical success is dependent on osteoblast activity. This is determined by age of patient or whether it is cortical or cancellous bone. In order to induce osteoblast activity it may be necessary to use autogenous bone graft or decortication of the bone. We expect that there will be more research and development of this new product in the near future.

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Clinical photos courtesy of ITDN.

This case shows the extraction of tooth #8 due to fracture in a 41 year-old female. After curetting the socket, an S size Foundation was placed and the gingiva was sutured to secure it. Two and a half months after the filling, Foundation augmented the alveolar ridge which allowed for an excellent cosmetic result with the fixed bridge.



Immediately after the suture



2.5 months after the filling



After prosthesis