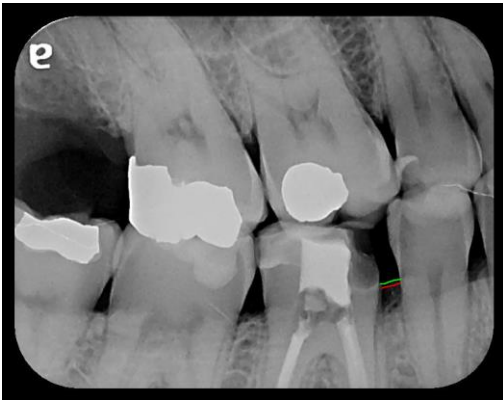


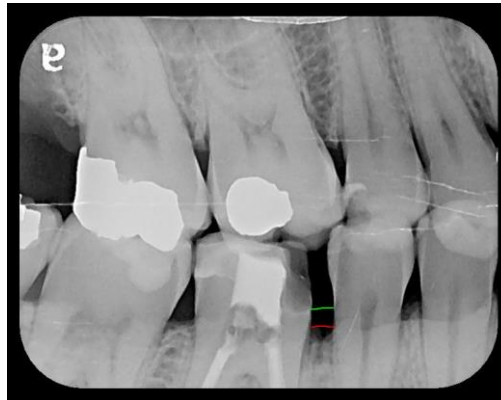
Clinical Case – Crown Lengthening #30

Key Attributes: This crown lengthening includes ablation of both soft tissue and bone, demonstrating precision and clean cutting.

Procedure by Dr. Joshua Weintraub



Pre-Op Radiograph



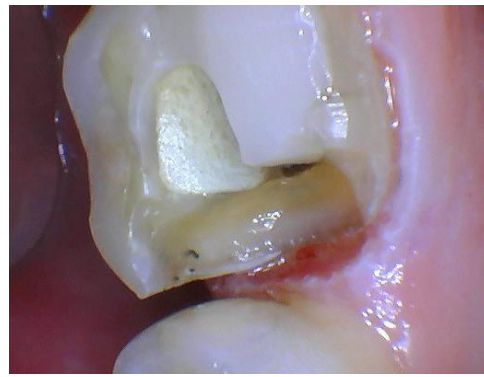
Post-Op Radiograph



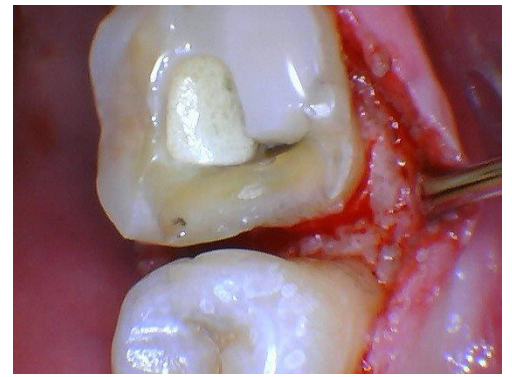
3 Month Post-Op Radiograph



Pre-Op



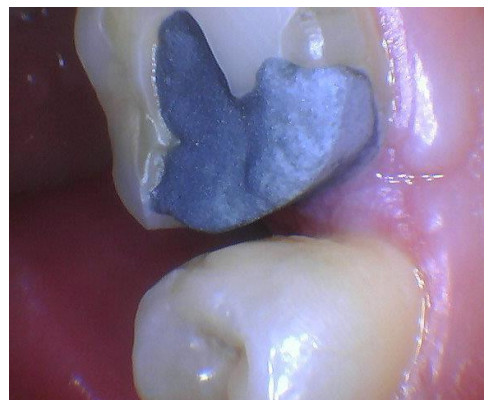
Post Gingivectomy



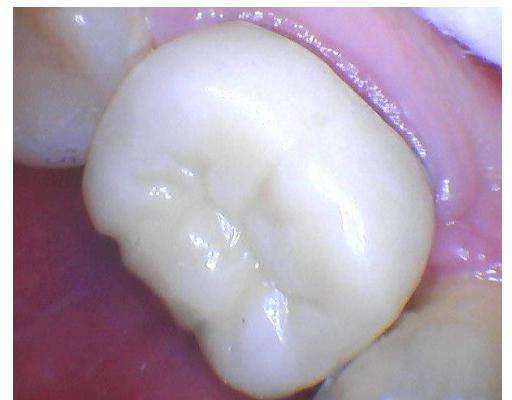
Post Osseous Reduction



7 Day Follow-Up



8 Week Follow-Up



3 Month Follow-Up

Case Summary

The patient presented with a fractured #30 ML. There was a history of endodontic treatment and the tooth was fractured to the crest of the bone. The clinical objective was to expose enough tooth structure to get a properly fitted crown and establish biologic width. On the pre-operative radiograph, note the green line on the mesial indicating the apical extent of missing tooth structure. The red line indicates bone level. Biologic width needs to be established. The post-operative radiograph shows the same location of the green line, with the red line indicating the alveolar bone level with adequate coronal tooth structure for proper restoration and periodontal health. The pre-operative photos show the area of most concern on the mesio-lingual. The total procedure time was approximately 50 minutes.

Technique Using Solea

Local anesthetic was used on this patient. The entire procedure was performed using the hard and soft tissue selection. To lay the flap, the 0.25 mm spot size (in lieu of scalpel, against mesial-lingual of molar), with 1% mist and cutting speed between 20% – 40%. The gingiva was then flapped (small flap elevated). Next, bone was ablated using the 1.00 mm spot size for bulk removal and 0.25 mm spot size closer to tooth with 100% mist (full mist is always used with bone) and cutting speed between 30% - 70%. A piezo scaler was then used to smooth the root surface removing any residual bone spicules. Finally, the procedure was completed with a temporary restoration (Miracle Mix, GC) and one 4.0 silk suture. The total procedure time was approximately 50 minutes.

Benefits of Solea

With traditional tools, this procedure is typically completed with a scalpel and high-speed handpiece with burs. This would entail an injection of anesthetic, bleeding and sutures, likely taking over one hour to complete. Without Solea, this procedure would have been referred to a periodontist because it would have been very difficult to complete without significant risk of iatrogenic damage. Solea's precision and ability to maintain a clean surgical site allowed this procedure to be completed successfully in under an hour.