SOLEA DOCTORS

Clinical Case – **Amalgam Removal (Occlusal)**

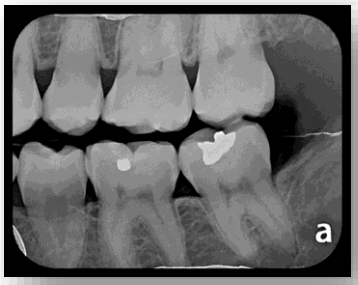
Key Attributes: **Demonstrates use of the laser to remove an existing amalgam restoration without anesthesia**

Procedure by Dr. Josh Weintraub

Pre-Op

0.25 mm Trough

Amalgam Removed



Radiograph

Finished Prep

Restored

Case Summary

The patient presented with a fractured amalgam and recurrent decay on tooth #18. The tooth was prepared using both Solea and the drill with topical anesthetic only. The total procedure time was less than 20 minutes.

Technique Using Solea

This procedure was performed without injectable anesthetic using the hard and soft tissue selection and 100% mist. To establish analgesia, Solea was used at a non-ablative cutting speed of 20% and a spot size of 0.25 mm. Subsequently, cutting speed was increased to approximately 60% in order to trough around the amalgam. A high speed and 245 bur was used to break-up and remove the amalgam. The prep was completed using Solea with a 1.00 mm spot size and cutting speed between 40% - 60%. The cavosurface margin was beveled with a diamond bur and the tooth was restored with composite. The total procedure time, from start to finish, was under 20 minutes.

Benefits of Solea

The use of Solea eliminated the steps associated with local anesthetic, including injecting the patient and waiting for the patient to become numb. Procedure time was reduced to 20 minutes compared to approximately 35 minutes with anesthesia and traditional instruments. Other potential time savings include the potential for multi-quadrant dentistry that could have been performed due to lack of anesthesia and time savings from potentially avoiding a follow-up appointment to adjust the bite.