



**Class II composite  
resin restoration  
on tooth #5 DO  
performed  
anesthesia-free by  
Dr. Heath Brantley**



**Case Summary:** A 32-year-old female patient presented to the practice for her routine examination. The radiographs revealed primary lesions located interproximally. The patient was diagnosed with primary caries on tooth #5 DO. The clinical objective was to successfully remove caries and restore the tooth while delivering an optimal patient experience. The clinical challenge for this patient was keeping her calm because she has had very minimal dental treatment in the past. The patient was apprehensive and required coaching throughout the procedure. The treatment was completed anesthesia-free using Solea in less than 10 minutes.

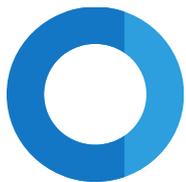


# SOLEA DOCTORS



**Technique Used:** The tooth was prepared with Solea using a 1.25 mm spot size with the cutting speed 40-50%. Solea's cutting speed is regulated with a variable-speed foot pedal that allows adjustment of energy from 0-100%. The outline of the prep was first traced at 50% speed ensuring very slow hand motion and even ablation of the enamel coronal to the lesion. After approximately 30 seconds, the speed was reduced to 45% to maintain a comfortable cutting speed. After the dentin was exposed, the speed was further reduced to 35-40%. The preparation was completed within 2 minutes using only the laser. The tooth was restored using a sectional matrix system in about 6 minutes. No anesthetic was used throughout the treatment.





S O L E A



DOCTORS



### Solea Advantage:

- No anesthetic was used.
- Reduced procedure time to less than 10 minutes compared to approximately 40 minutes with traditional tools.
- The patient's occlusion was easily confirmed because the patient wasn't numb, which potentially avoided a follow-up appointment for a bite adjustment.
- Patient received a much better experience that includes not being injected with anesthesia and a shorter appointment time.

**Results:** Excluding the shot and the drill from routine procedures, changes apprehensive patients' perspective of dental visits. These patients are often easier to treat when their anxiety levels are reduced. The third criteria that often leads to increased anxiety is a long, drawn out appointment. When the appointment takes 10 minutes from start to finish, it is over before the patient is even aware that it has started. Shorter appointment times also increase Dr. Brantley's productivity by enabling him to see more patients per day and perform more procedures in one visit.