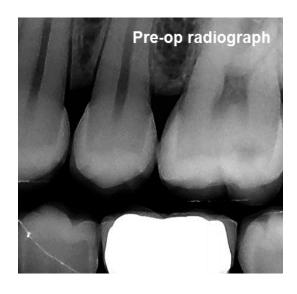
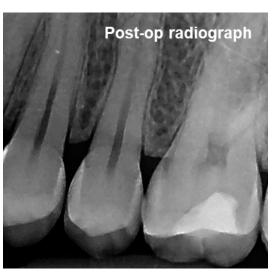


## S O L E A • DOCTORS

Deep Class I restoration performed anesthesia-free in less than 25 minutes by Joshua Weintraub, DDS





Case Summary: A 25-year-old female patient presented to the practice for her first appointment. During the comprehensive oral evaluation, she was diagnosed with a deep decay on tooth #14 OL. The clinical objective was to remove decay and restore the tooth. The patient was in her 2<sup>nd</sup> trimester of pregnancy and admitted having dental anxiety because of previous experiences at the dentist as well as concern about the safety of her child. Considering the circumstances, the clinical challenge was to treat the deep carious lesion anesthesia-free while managing her anxiety and keeping her calm throughout the procedure.



## S O L E A DOCTORS





Technique Used: The entire procedure was performed using Solea with a Contra-angle handpiece. The dentist utilized appropriate spot size diameters, from 0.25-1.25 mm, and mist between 1-100%. Solea's cutting speed regulated with a variable-speed foot pedal that allows adjustment of energy from 0-100%. To start, the 1.25 mm spot size with cutting speed between 30% - 60% was used to smoothly cut through the enamel. Then, the 1 mm spot size with the same cutting speed was used to remove decay and complete preparation. Cavosurface enamel margins were beveled with a diamond bur. The tooth was restored of composite. The total procedure time was less than 25 minutes, and no anesthetic was used.





Solea Advantage: The patient was clearly nervous about the procedure, which under normal circumstances and with traditional tools would require a significant amount of anesthesia. If this patient had to be injected with anesthetic, she may have become so nervous that it may have been difficult to finish the treatment in a reasonable amount of time. Maternal concerns about any pharmacological substances would also increase apprehension, and anxiety should be minimized to reduce risks to her pregnancy. With Solea, this procedure did not require any anesthetic and was performed almost entirely with the laser, with minimal use of a high-speed handpiece only for the final diamond bevel of enamel. Moreover, the dentist did not have to stop to calm the patient down before an injection and then spend time waiting for anesthetic to set in, which reduced procedure time from typically 35 minutes to less than 25 minutes with Solea. Also, because this procedure was performed anesthesia-free, the occlusion was confirmed easily - potentially avoiding a follow-up appointment for a bite adjustment.

Results: By using Solea, the dentist easily managed the case objectives: removing the decay, restoring the tooth, and minimizing the dental anxiety associated with the procedure. He also increased his productivity because he completed this procedure faster than he would have with traditional tools, which means he has time to perform additional procedures or see other patients. He also retained this new patient because she was very satisfied with the quick and anesthesia-free treatment, and she is much less anxious to return to the practice for her next appointment. She admitted having a much more favorable dental experience: "I was so nervous and that was pretty easy!"