An IPS e.max CAD single crown – First upper molar in 75 minutes

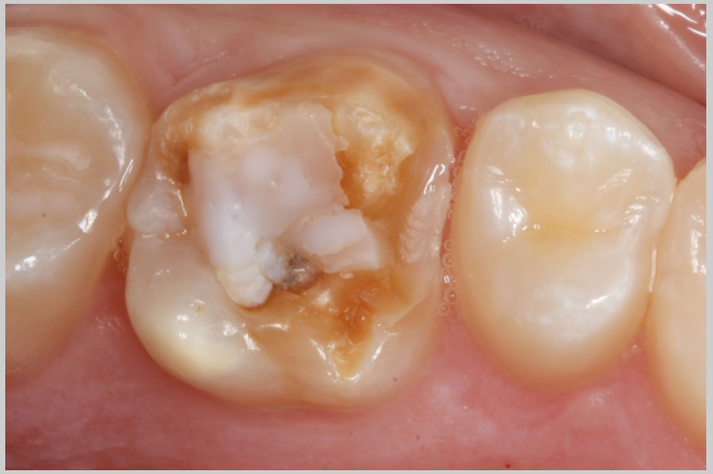
Case Description

A 32-year-old male patient consulted my practice due to decay and a failing direct composite restoration on tooth 26. The treatment plan was to fabricate a full-coverage crown for this tooth in a single visit. After infiltrative administration of anesthesia with Septocaine®, tooth 26 was prepared for a crown. The digital impression was then taken with CEREC Primescan and the crown was designed in CEREC Software. The initial software proposal was very good and the design did not need to be modified. For the crown, we chose an IPS e.max CAD block MT shade A2 size 26. After placing the block in the CEREC Primemill, we initiated the pre-touch process, even though the crown had not yet been designed. The advantage of the pre-touch process is that my assistant can prepare the milling unit while I work in the patient's mouth and the fabrication process can begin as soon as the start button is pressed. With CEREC Primemill, the restoration was completed in a very short time. Due to the pre-touch step and the grinding protocol itself, the entire grinding process has become faster overall. After sintering and glazing in the CEREC SpeedFire, the crown was ready to be fixed with Calibra Ceram. In total, the treatment time was only about 75 minutes.

Discussion

Producing restorations in just one session is now faster than ever before. A quick and very accurate scan, manageable and intuitive design software, combined with a milling and grinding unit that completes a restoration in just a few minutes, makes for a significant increase in efficiency and great patient satisfaction with my practice.

Dr. Dan Butterman
Centennial, USA



Before:
Tooth 26 presenting decay and a failing direct composite restoration.

After:
Highly esthetic and functional lithium disilicate ceramic crown.

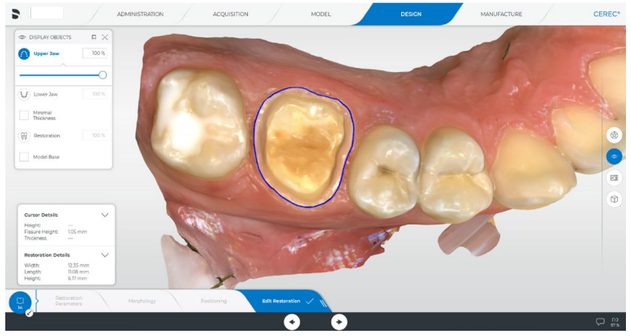
Clinical Images

Pre-op tooth 26 with a failing composite restoration and recurrent decay.

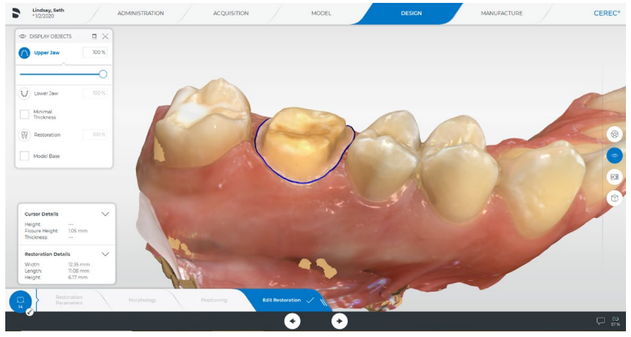
The old restorative material and the decay were removed, and the tooth has been prepared for a full-coverage crown.

The final e.max crown bonded in place.

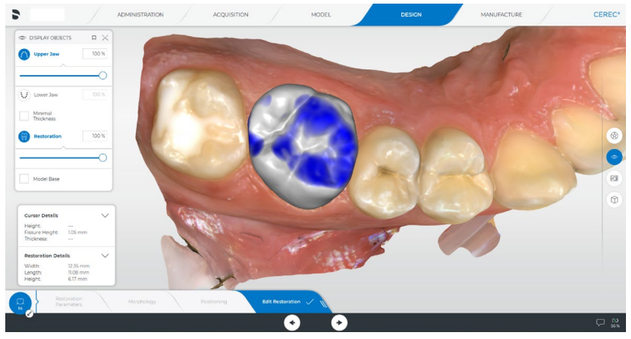
Workflow Images



Top view of the initial model with successful automargination.



Side view of the initial model. The margin did not need to be edited.



The initial crown proposal: no tools needed to be opened to edit this restoration because the initial proposal was perfect.