

# Micro-etching is a Must for the Direct Repair of a Fractured Porcelain Veneer

Instead of having to replace a fractured porcelain veneer, a direct composite bonding technique can be used. This places complete control of the case in the hands of the clinician while avoiding the time consuming and costly replacement of the porcelain veneer.

The problems and challenges in replacing a single porcelain veneer include:

- lab fees
- shade matching to old porcelain
- multiple appointments
- provisional fabrication

The benefits of direct resin repair are:

- single visit
- no provisional
- complete shade matching control
- reduced cost
- ability to evaluate if occlusion was the cause

***Images 1-8 demonstrate step-by-step instructions for this common clinical scenario:***

1. The patient had porcelain veneers placed about 12 years ago. She now presents with a fractured veneer at the mesio-facial-incisal aspect of the upper left canine.
2. The porcelain/enamel surfaces are mechanically etched using the EtchMaster with 27 $\mu$ m aluminum oxide, (then rinsed and dried). The adjacent tooth is protected from the etching process by using dead soft foil.
3. The etched surfaces now show a frosted appearance. Preparing these surfaces with the EtchMaster increases bond strengths an incredible 30x
4. These surfaces are now chemically etched with a hydrofluoric acid gel for 2 minutes (then rinsed and dried)
5. A silane porcelain bonding agent is applied to the thoroughly etched surfaces and dried
6. A primer/resin bonding agent for both porcelain and enamel is applied, gently dried to a thin coat and then light cured
7. A matching direct composite resin is sculpted to place (and light cured)
8. The completed case after occlusal evaluation, adjustment and polishing .

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