Aquasil® Ultra+ Ceram.x Spectra™ ST SDR® flow+ Prime&Bond active® Enhance®

CASE REPORT

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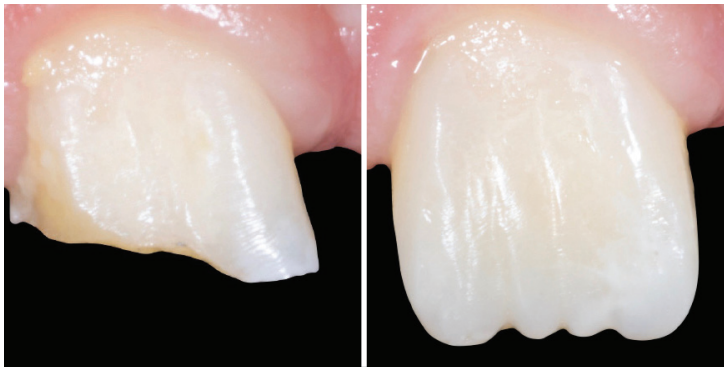

Ceram.x Spectra - direct restoration of a fractured incisor

Treating young patients is a challenge itself even in short sessions. While restoring large fractures for children requires patience and speed at the same time.

This 8 year old patient presented with his mom for restoration of a fractured central incisor with a referral from their family dentist and endodontist [fig. 1-3]. Root canal was already filled when patient arrived. Gutta-percha isolated and some temporary crown restoration was done as well beforehand.

We decided to do a direct composite restoration in order to restore shape and function of the right central incisor. Quick shape and shade analysis was done and direct composite mockup performed [fig. 4]. Silicone impression (Aquasil® Ultra+) was taken of the mock-up and cut into a silicone index. Teeth were isolated with rubber dam system to achieve moisture control and good visibility of the tooth, temporary filling removed [fig. 5]. Ceram.x Spectra™ ST* composite was chosen to be used in this case due to the great aesthetic characteristics: chameleon blending abilities, polishability and stain resistance. The surface of the tooth was selectively etched and adhesive (Prime&Bond active®) applied, light cured. Pulp chamber was filled with SDR® flow+ to reduce stress and Ceram.x Spectra™ ST shade A2. Shade E1 was chosen for incisal third and shade A2 for middle third of palatal wall [fig. 6]. Dentine core was restored with D3 shade to mimic the choma and opacity of a natural deep dentine and shade A2 to restore superficial dentine layer [fig. 7]. Some white tint was used to mimic white spots on the contralateral tooth. Shades A1 and E1 were used as artificial enamel [fig. 8]. Shade E1 is a value modifier (achromatic enamel shade) and was used for incisal third. Shade A1 was used to restore chromatic enamel.

Restoration finished and primary - tertiary anatomy carved with burs and Enhance® fiishing discs, points and cups. Polishing performed using Pogo polishers and Prisma gloss polishing paste with special polishing sponges. Rubber dam removed and occlusion checked [fig. 9].

Patient was recalled in two weeks to check the tissue integration after two weeks [fig. 10]. Notice great hue, value, chroma and opacity match.

Restoring fractured teeth is very difficult. It requires quick planning and a three dimentional perception of shade and shape. Children have highly thick and chromatic enamel (high croma and value) - this is favourable for a dentist. However primary, secodary and tertiary anatomy is very complex in young patients. Great sculptability of composite is a must in these cases as well as polishability and stain resistance. Ceram.x Spectra™ ST composite demonstrates the required qualities due to the SphereTEC filler technology and is highly recommended for anterior aesthetic cases.

* alternative brand for Ceram.x Spectra™ ST is Neo Spectra™ ST, for SDR® flow+ is SDR® Plus, for Prime&Bond active® is Prime&Bond universal™

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fig. 1

fig. 2

fig. 3

fig. 4

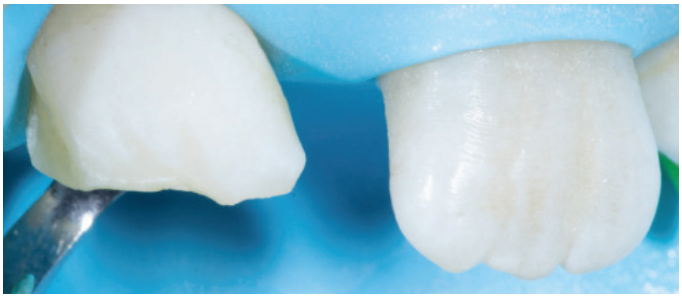

fig. 5

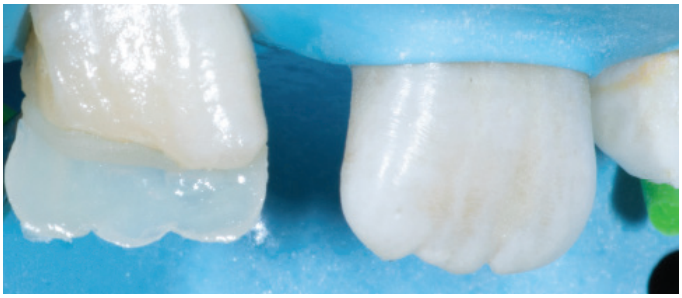

fig. 6

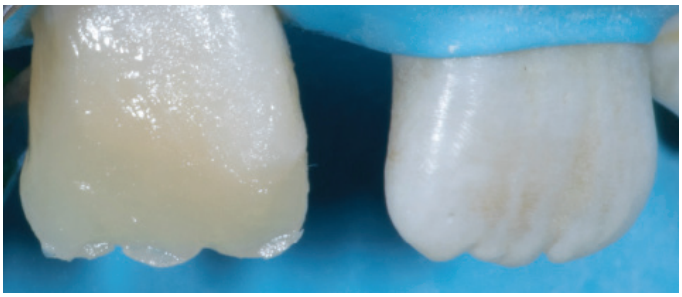

fig. 7

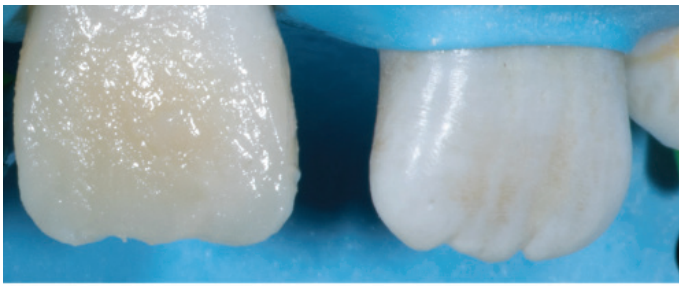

fig. 8

fig. 9

fig. 10

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