



## Veneer removal

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Introduction:

The patient was a healthy 40-year-old woman with Emax veneers on her upper central incisors. The veneer on the upper right incisor fell off during summer vacation and the patient had the veneer re-cemented by a dentist at another clinic. When the patient came to our clinic, she was unhappy because the veneer showed a discoloration due to a poor cementing technique. To save the veneer, we decided to remove the veneer without breaking it, clean it and re-cement it properly. An alternative to this would have been to make a whole new veneer.

Laser	LightWalker	
	Removal	Surface modification
Wavelength	2940 nm	2940 nm
Handpiece	HC02	HC02
Fiber tip	/	/
Energy	175 mJ	100 mJ
Power	5.25 W	1.5 W
Mode/Pulse	MSP	SSP
Frequency	30 Hz	15 Hz
Water	3	4
Air	6	4
Sessions	One	

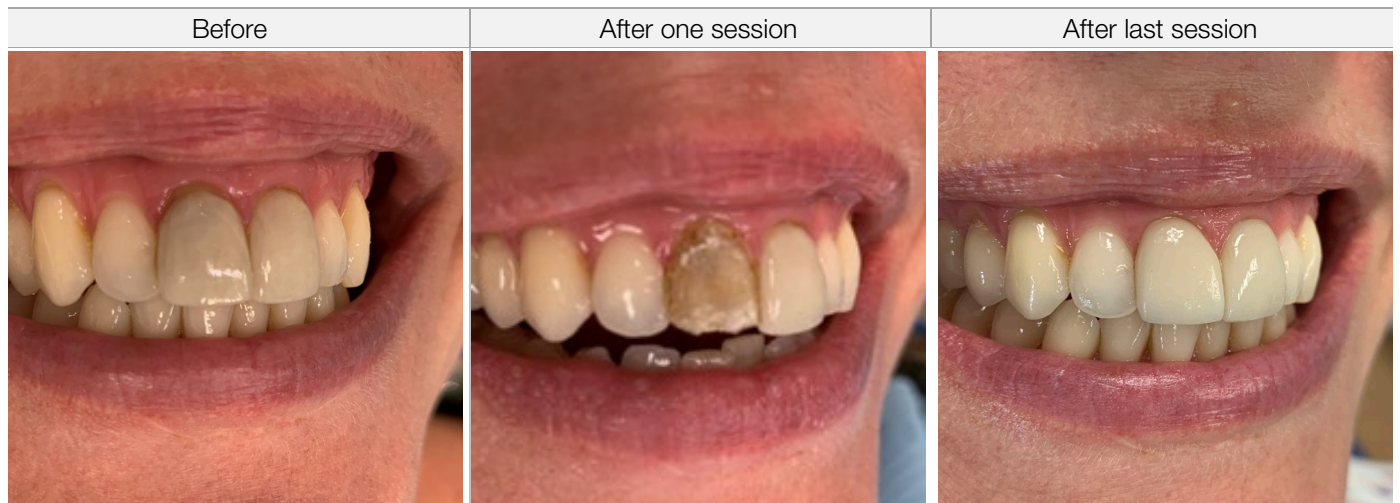


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## CLINICAL CASE:

After informing the patient of the risk that the veneer could break, we used 2940 nm Er:YAG with the HC02 handpiece in non-contact mode, approximately 10 mm from the tooth surface. With a low energy 175 mJ, MSP, 30 Hz, with water (3) and air (6) to cool the veneer, we covered the whole porcelain surface in painting, sweeping movements. After several passes we tried to remove the veneer. When the veneer did not come loose easily, we went for additional passes, again covering the whole surface of the veneer. The veneer was then successfully removed without breaking. The patient felt no pain or discomfort. We cleaned the tooth surface from cement with the settings for surface modification, 100 mJ, SSP, 15 Hz, and continued scraping the surface with an excavator to remove all residual cement, etched, applied prime a+b according to the manufacturer's instructions, and re-cemented the veneer with Variolink Esthetic. The veneer was cleaned with aluminum oxide blast and treated with silane prior to cementation.

According to the article Ceramic Bridge Debonding by Dr. Dmitri Malev, LA&HA Journal, Volume: 2019, ISSN (print):1855-9913 we could have used more energy to save us time, but since the veneer was thin we started with low energy and it was enough.



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