

Application in periodontology

Procedure/Study by

Dr. Giacomo Derchi, La Spezia - Italy

Fiber Splint Multi-Layer (ML)



Dr. Derchi graduated with honors in Dentistry and Dental Prosthetics in 2003 from the University of Genoa and enrolled in the Order of Doctors Surgeons and Dentists of La Spezia in the same year. After achieving the Master's degree at the University of Genoa and a PhD in International Nano Biotechnology at the University of Genoa, Dr Derchi is having a private practice in La Spezia since 2008.

Head of the First Aid and Conservation Unit at the Tirreno Dental Institute - Ospedale Unico Versilia (Lido di Camaiore), he collaborates with other Professors for scientific research and didactic activities.

Beside his practice activities, Dr. Derchi is an active member of the International Association of Dental Research (IADR), Italian Society of Oral Surgery and Implantology (SICOI) and Italian Conservation Society (SIDOC)

Speaker at evenings and courses on issues of restorative dentistry, he is also author of numerous publications in national and international journals

Case Report

The patient, a 55 year-old-woman, non smoker, presents a good general anamnesis and an increased mobility of teeth 32, 41 and 42.

The following case shows the step-by-step splinting procedure of teeth 41 and 42 with the other mandibular incisors and canines.



01

Clinical situation before treatment



02

Cleaning of all lingual surfaces of the involved teeth, with a fluoride-free polishing paste and a professional brush.



03

A rubber dam has been placed in order to isolate the operative field. The necessary length of the fiberglass ribbon is measured using a dental floss.



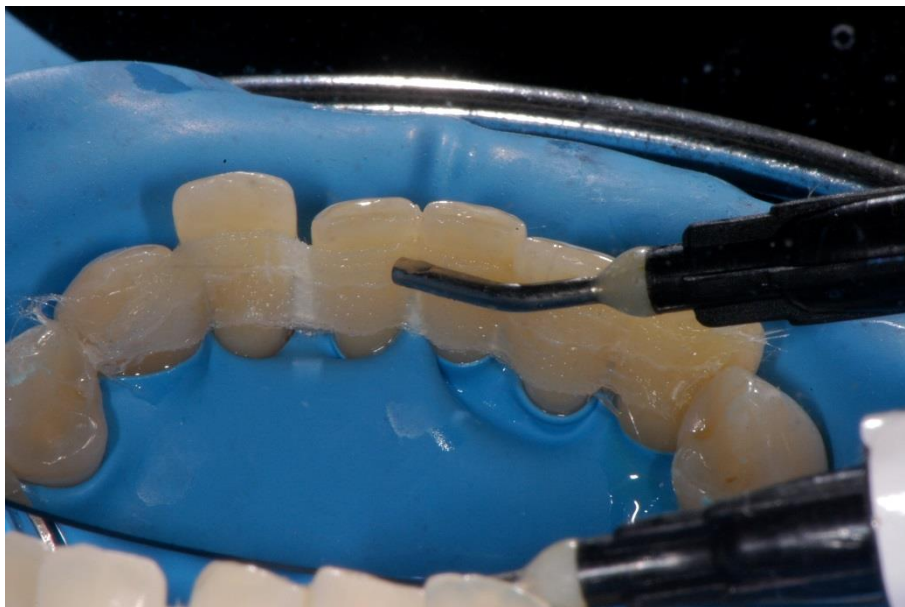
04

The lingual surface is etched, coated with primer and bonding agent. At the same time, the fiberglass ribbon will be impregnated with bonding agent outside of the oral cavity.



05

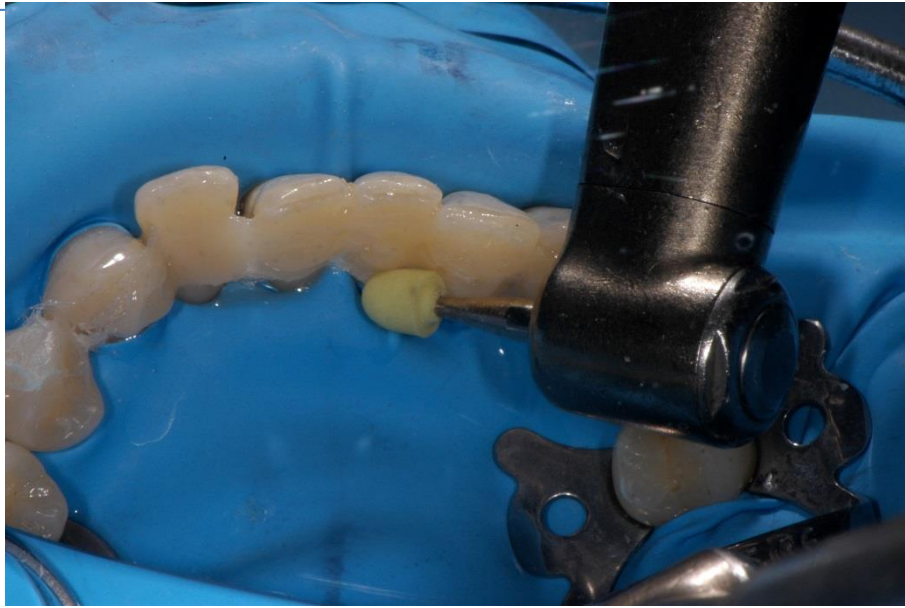
The fiberglass ribbon has been positioned with Clip&Splint, but not yet light-cured. The ribbon perfectly fits to the lingual surface of the involved teeth by adhering into the interdental spaces thanks to the application clips. Light-cure.



06

The hardened fiberglass ribbon is coated with a layer of flowable composite in order to get a smoother surface and for general protection.

07



Finishing and polishing phase, with Composite Polishers.

08



Final vestibular view. The transparency of the fiberglass ribbon grants an outstanding aesthetic result.



09

Lingual view of the splinted teeth. The thickness of the fiberglass ribbon is minimal.



10

After one month, the patient came back for a checkup. It is visible that the oral hygiene has been easily kept using interdental brushes and sticks in the inferior anterior sector.

Conclusion

Fiber-Splint Multi-Layer (ML) provides a comfortable and reliable solution for all kind of treatments with dental splints. The aesthetic results are excellent, granting full comfort to the patients and enhancing their self-confidence. The technique is time-saving and cost effective. The manageability is also optimal: no special scissors are required and the fiberglass ribbon does not fray while cutted. Fiber-Splint ML offers therefore an easy to use, reliable and biocompatible alternative to metal splints.