In mid-October 2016, Drs. Domenico Massironi and Stavros Pelekanos held a course at the Master Educational Group for those wishing to improve their knowledge of esthetic dentistry. Sixteen dentists from all over the world attended.

During the course, Dr. Massironi demonstrated his vision of minimally invasive dentistry to maintain tissue integrity as far as possible for a predictable and harmonious result. Over the four days, the participants were taught the modified chamfer technique, which can be used with every type of material and restorative technique currently available.

This marginal finish design is part of a greater preparation system using rotating instruments driven by electronic devices, such as an induction micromotor, and pneumatic oscillating instruments, without rotation of the working instrument, that include sonic inserts and manual instruments, such as rounded chisels. This method is almost entirely independent of individual skill and thus suitable for every clinician, as it is not operator sensitive. It can easily be used by both a novice dentist and an expert clinician with immediate and reproducible results.

The fabrication of a prosthetic restoration consists of many different steps that
involve both clinicians and dental technicians with the aim of achieving a perfect anatomical, functional and esthetic integration of the prosthetic restoration into the patient’s mouth. In this regard, the preparation of the tooth has always represented one of the most important procedures for the patient’s rehabilitation by fixed prosthesis.

The modified chamfer described by Dr. Massironi consists of a preparation design with a more rounded chamfer curve compared with the traditional chamfer and longer than the rounded shoulder, in order to gain a profile that adapts well to different types of restorative material. This modification results in a shallow (and thus less aggressive) preparation that is less operator sensitive compared with the more traditional shapes, such as a rounded shoulder or 90° shoulder.

The choice of marginal finish for full-crown prosthetic preparation is usually according to the clinician’s skill. The latter depends on what the clinician learned during his or her undergraduate education or in postgraduate courses presented by more experienced colleagues, or his or her personal expertise. For these reasons, such choice is often motivated by ease and experience criteria, though sometimes it may depend on the type of restorative material or on the intrinsic characteristics of the tooth. Furthermore, abutment height, number of teeth to be splinted, adhesive cementation system and esthetic needs may affect the choice. The proposed modified chamfer design is innovative and universal, because it may be adapted to every kind of prosthetic restoration and marginal closure, including the complete marginal border, the microborder where the metal, opaque material and ceramic converge, metal-free methods and CAD/CAM technologies, and shoulder structures or full feldspathic ceramic. Its great versatility is also associated with its easy clinical use, because its particular shape makes it less sensitive to clinical ability; thus, it is less operator dependent compared with other common horizontal marginal finish designs.

The main challenge nowadays is finding the right balance between a minimally invasive approach and an excellent esthetic result. Esthetics is a direct consequence of maintaining the tooth’s health and function.