Abstract (1) “Modernity of shoulderless tooth preparations”

The tooth preparations for prosthetic crowns are currently classified according to the characteristics of their marginal finishing line and are divided into two classes: those horizontal and vertical ones.

Preparations are defined horizontal ones to shoulder and chamfer preparations and vertical ones at knife blade (knife edge). The terminology used in the literature to define the vertical preparations are varied and many authors invariably use terms such as feather edge, knife edge, shoulderless.

The abutement vertical preparation has many advantages such as a greater tooth structure preservation, more easiness to parallelize numerous abutements, a smoother final impression execution, better management of the temporary restorations.

In the preparation of the vertical type the marginal closure of prosthetic crown on the stump occurs through the coupling between two inclined planes that come into intimate contact with each other. The connection between these two inclined planes is based on the principles governing the coupling and the seal obtained between the primary component and the secondary one in the telescopic prosthesis locking taper configuration.

Numerous studies, both in vitro and in vivo, by measuring the size of the marginal gap of prosthetic porcelain fused to metal crowns (PFM) after cementation have verified a smaller width of the gap with the use of vertical preparations with respect to the horizontal ones.

In addition, the vertical preparation can be performed intraoperatively (with open flaps) during the osseo-resective surgery going to prepare the tooth to the bone margin or at the level of the connective fibers inserted into cementum.

In prosthetic dentistry vertical preparations are used for many years both on teeth with periodontal intact or on teeth with reduced periodontal.

Their use allows the creation of prosthetic abutments with a greater preservation of tooth structure with respect to the shoulder or chamfer preparations and is suitable both for the creation of PFM both for prostheses constructed with the most current materials such as zirconia and lithium disilicate also exploiting the CAD / CAM technology.

These features make vertical preparations extremely current and useful in daily clinical practice as long as the prosthodontist and the technician are aware of a particular operational protocol that becomes one of the determining factors for the final prosthetic success.

Abstract (2) "Aesthetics in fixed prosthodontics between tradition and innovation"

Today, research and industry have provided for us prosthodontists new materials and sophisticated technologies that allow us to reach very good cosmetic results, sometimes excellent, in any rehabilitation.
This provided they are known and respected traditional therapeutic and prosthetic protocols.

In medicine it always starts from the diagnosis, so after an adequate data collection must first of all get to make a diagnosis of the whole mouth-organ and understood as a result set the most appropriate treatment plan.
Speaking about comprehensive rehabilitations can not be ignored by a careful examination of the supporting tissues. So you have to restore periodontal health with the appropriate treatments and rebuild ideal volumes of tessues if they were lost, as evidence of the unbreakable link between prosthesis and periodontics.

Also not in all cases the new materials or digital techniques may be the best option. Therefore both the prosthetist and the technician must be able to choose according to the clinical case the most suitable material, the most suitable technology so that these innovations really constitute an advantage for our patients.
Finally, the integration of the artificial (prosthesis) in the natural (mouth) must take particular care to ensure the good progress of all functions involved such as chewing and phonation.
In fact, it makes sense to talk about aesthetics only if it takes place in a proper function context.
Only then we can give to our prosthetic rehabilitations an adequate prognosis.



About me

I got a degree at Parma University, Italy in 1989.

I attended many specialization courses and stages both in Italy and abroad.

My clinic practice aims mainly to periodontology, implantology and prosthetic rehabilitations.

I have been spokesman during many congresses and masters above all about periodontal prosthesis ,knife-edge and feather-edge tooth preparation and esthetic dentistry.

I work in Castiglione delle Stiviere (MN) near Garda Lake and in Parma.

Since 2013 I've been an active member of AIOP (Italian Academy of Prosthetic Dentistry).

Visiting professor at Parma University.