

# PROSTHODONTICS

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## Digital protocols for an easy digital flow and how to develop high-quality products with zirconia and titanium bars

**Miquel Ferrer Estelrich**

Form3dental, Spain

This type of restoration is based on an internal structure of milled titanium screw-retained on implants (preferably with transepithelial). This structure supports a single-block prosthesis of zirconium or milled composite. The realization of the case requires minimal patient visits. The clinician sends us a pre-preparation scan with the patient's provisional prosthesis, the articulation, antagonist, emergence profile of the implants, and finally the reading of the scan bodies. From a printed prototype based on the patient's immediate load or removable prosthesis, the clinician performs a test to check aesthetics and occlusion, making the appropriate modifications. At the same appointment, a verification test of the aluminium passive is performed. With all the information obtained, the titanium structure is designed and, if necessary, a final impression test is made on it. In the case of not being required, the work would be sent finished in the third appointment of the patient. The realization of hybrid prostheses with acrylic teeth has generated an infinite number of problems due to tooth breakage. In most cases, the prosthetic space was not advisable to make a metallic structure to support a splint tooth glued with conventional acrylic. Unlike these teeth that were individually bonded, the Y.brid is made with a mono-block supra structure that is cemented together on the titanium bar. In the hypothetical case of breakage, we would only have to recover the STL file and mill it again, without having to make a new assembly of teeth in the traditional way.

### In a classic system of Full Zirconia with Interfaces we found problems that can sometimes be key:

- Number of pontic/cantilever pieces, limits us to do the right job as the prosthesis may have more pontic pieces in a row than the zirconia manufacturer guarantees, the area of the connectors between these pieces not being adequate, which could cause a fracture of the same. And therefore, the impossibility to manufacture it.
- Ti-bases. It is necessary to use interphases that on many occasions can influence the volumes of the zirconium, altering the ideal volumes in the interdental areas. It also prevents us from conforming the ideal emergence profiles or angulations of the access channel of the screw.
- The cementation surface is sometimes not very extensive, which can cause an incorrect adhesion of the interphase due to lack of ferrule.
- In other occasions the cementation may not be generated with the maximum possible precision by the laboratory.

form3dent@gmail.com