

MATCHING RESTORATIONS WITH DIFFERENT MATERIAL AND PREP FOUNDATIONS ©

20 years ago, when we needed to do one or two single anterior PFM crowns, it used to be argued by both dentists and technicians that it was “easier”, for shade matching reasons, to prep and restore multiple anterior teeth (4-6), even if the others did not need to be restored. Indeed, this was a valid argument back then because the foundation of all restorations was all the same (metal), and it is no doubt easier for technicians to match multiple PFMs than to match one only.

Today, in the plethora of materials and techniques in the dental world – this argument is not necessarily valid. With translucent porcelain restorations (e.Max for example) it would only be valid if all the restorations are prepped at exactly the same thickness and if all stump shades are exactly the same. It is NOT a valid argument as soon as the underlying foundation (the stumps) are different in color and shape, and/or you are working with a mix of materials and techniques i.e. e.Max crowns mixed with e.Max veneers, or PFZ or PFM crowns/bridges mixed with any type of e.Max translucent restorations in the same case.

Matching veneers and crowns in the same case is actually a very difficult and complex process - even if all the restorations are done at the same time and using the same material.

The truth is that we don't know the final appearance outcome of translucent porcelain restorations because the outcome depends on the stump color and the post bonding color shift that always occur. The process is unpredictable, we simply don't know what they will look like until they have been bonded to the teeth for at least 48 hours. Color shifting can take place up to a whole week after bonding. The final color matching of core supported crowns to translucent porcelain restorations must therefore be done *after* the translucent porcelain restorations have been bonded in place for about one week.

To give us the best chance possible, all equally prepped and shaded translucent porcelain restorations should be bonded in place at the day of insertion (e.g. veneers), while any e.Max, PFM or PFZ crowns should **not** be cemented permanently right away – even if they happen to look good on the day of insertion! You should wait at least 48 hours and up to one week, then take another peek at the color match between the now already inserted, translucent porcelain restorations and the not-yet-inserted crowns. If acceptable, the crown(s) can now be cemented. If the crown(s) needs color changing (which is likely), then the best way is to send the patient to the lab with a loose temporary, so that the technician can do the color “tweaking” while the patient is waiting. We then send the patient back to you for permanent cementation of the crown(s).