Aerosol ceramic bonded titanium substructures and abutments

Ceramic coated dental abutments offer dental professionals an alternative to zircon abutments in anterior regions of the mouth for esthetics and strength. For many decades dental professionals and dental patients had no alternative for titanium abutments. Esthetics became a problem in many cases as the tissue is translucent, a grey shadow of the alloy would be visible under the tissue above or below the porcelain fused to metal or all ceramic restorations. Dental ceramic manufacturers attempted to resolve the problem with a hand applied bonding agent applied with a brush to the abutment and fired. The next step was to brush on a tooth-colored opaque over the bonding layer to hide the grey alloy. This method was both time consuming and if there was an area that was applied too thick in the bonder the ceramic would delaminate from the abutment or substructure. The alternative became the use of zircon abutments as they are white in color. Even with the strength as with any ceramic when it is thin and unsupported it will break. The problem with zircon used in the anterior regions of the mouth is many times they are small and break during seating or afterward when stressed by the patient in bruxing or biting into food which applied stresses to the anterior restorations causing the zircon abutment to break off the implant in the mouth. To resolve this problem the best alternative was to apply ceramic binder and opaque with the aerosol application. The aerosol application provided the thin even layer of bonder to the abutment or substructure for the optimal strength of bonding colored ceramic to the abutment. This application resulted in the strongest ceramic bond to titanium in the dental profession and the strength of titanium without the grey shadow under the translucent tissue.

Biography

Entrepreneur, out of box thinker, his interest primarily in dentistry. However, as his profile indicates, very open to new challenges, especially when he sees where a trend in technology is moving. He is personable, a people person who enjoys being a team member, being involved in product development, manufacturing, marketing and sales strategies. Training people on new products or technology. Mentoring and having mentors is important to me, he feels everyone has knowledge that they can pass on to others with whom they communicate. Setting goals is very important in life, career and profession. Religion, family, friends, volunteering for wounded warriors and a variety of recreational activities. His hobby is custom knife making for outdoorsmen and collectors.

Notes: