

Implant Surface Structure

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Dental Implants can also

be characterized by their macro and microscopic surface configuration. Macroscopically, we deal with two basic types of implants: Screws and Cylinders. Microscopically we deal with an assortment of surface treatments and coatings which are all designed to promote osseointegration.

Screws and Cylinders

both work effectively. There are some significant differences in technique here, but I would be hard pressed to say that one design is better than another. There have been several articles comparing the differences between screws and cylinders and espousing one over the other in certain situations, but it all comes down to personal preference and not science at this time.

Surface controversy has

been high on the implant manufacturers hype. It is understood that there might be something that we can do to the implant surface that will make it integrate faster and more securely to the bone. We do know, for example, that the addition of Bone Morphogenic Proteins (BMP) will accelerate and enhance bone formation around an implant and in a graft situation, but we cannot say this for mechanical surface enhancements. At this point in time, however, manufacturers claims far outpace what the reality is... But, some day, we will be able to design implant surfaces that will react better and faster with bone.