New Materials and technique used in Prosthodontics & dental implant

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Advance in dentistry and development of technologies can be reached by improving materials. Biocompatibility, low plaque affinity, good aesthetics and characteristics close to dental structure are essential to modern materials used in advanced dentistry.

Properties of PEEK:

Polyether ether ketone PEEK is a linear polymer.PEEK is non-allergic (the best biocompatibility) and has low plaque affinity. Elastic modulus and tensile properties are close to human bone. It is lighter than the dental metal alloys and ceramic materials.....

Applications of PEEK:

The fields of application includes implant materials, Implant abutments, and implant-supported bar or clamp materials. Even for fixed dental prostheses (FDPs) and removable denture framework.....

CAD-CAM milled prostheses

Using CAD-CAM to manufacture restorations makes it possible to produce dental prostheses chair-side. Three-unit PEEK fixed partial denture manufactured via CAD-CAM has been suggested to have a higher fracture resistance than pressed PEEK dentures. The fracture resistance of the CAD-CAM milled PEEK fixed dentures is much higher than those of lithium disilicate glass-ceramic, alumina, and zirconia.

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