

Abstract

A technique is presented for the restoration of single tooth, implant supported crowns where the abutment and the crown material are chemomechanically bonded; therefore, there is no need for cement, and the implant and implant abutment are connected with a screwless locking taper. The clinical and laboratory procedures involved in the fabrication and insertion of the restoration are described in detail. This restoration offers the restorative dentist some advantages: excellent marginal adaptation with a cementless interface, a bacterially sealed implant abutment connection, a crown material with a similar wear rate and hardness values of human enamel, a simple laboratory technique, and a reduced number of prosthetic components. Due to the light cured nature of the crown material, chairside modifications can be accomplished. The major drawbacks are: studies are necessary to assess the long term performance of the Integrated Abutment Crown™ (IAC)'s in both anterior and posterior areas of the mouth. Resin materials have higher roughness values, accumulate plaque at a higher rate, and are more likely to stain than tooth structure and all ceramic restorations.