The aim of this study was to evaluate peri-implant bone reactions around immediately loaded conical implants (Bone System, Italy) with metal and acrylic resin prosthetic restorations. Five splinted conical implants were inserted in each hemimandible of six minipigs at the alveolar crest level. Ten implants were inserted in each minipig. All the implants were immediately loaded. The implants were divided into a group with an acrylic resin prosthetic restoration and into another group with a metal prosthetic restoration. No postoperative complications or deaths of the minipigs occurred. All minipigs were killed after 3 months. No implant was lost. A total of 60 implants were retrieved and processed to obtain thin ground sections. Histology and histomorphometry showed the presence of compact, mature bone around all the implants. Bone was in close contact with the implant surface starting from the first or second implant threads. A high quantity of mineralized bone was present around immediately loaded conical, root form implants. No differences in the peri-implant bone response were found in the groups with different prosthetic reconstructions.


Peri-implant bone reactions around immediately loaded conical implants with different prosthetic suprastructures: histological and histomorphometrical study on minipigs.

Assenza B, Scarano A, Perrotti V, Vozza I, Quaranta A, Quaranta M, Piattelli A, Iezzi G.