**Comparison of crestal bone loss and radiographic bone density change around immediate functional versus non-functional loaded dental implants: A parallel group randomized clinical trial**

**Kaushal Kishor Agrawal**  
King George Medical University, India

Some studies comparing immediate functionally loaded and non-functionally loaded implants have found a significant difference in crestal bone loss and implant survival rates while some others have found immediate functionally loaded and non-functionally loaded implants to be comparable with respect to the same parameters. The previous studies only illustrate the lack of consensus regarding the loading protocol for immediately loaded implants. There exists a dilemma regarding the protocol for immediate loading; this prospective experimental study was conducted to determine whether there exists a difference in bone response with respect to immediate functional and non-functional loading. The study sample consisted of 120 subjects who were partially edentulous in the mandibular arch and were randomly divided into 2 groups, each consisting of 60 subjects. Group I subjects were restored with implant system with immediate functional loading and Group II with implants system with immediate non-functional loading. Both groups were evaluated at baseline, 3 months and 6 months for crestal bone level changes and radiographic bone density changes. It was concluded from the study that immediate loading of implants helped to stimulate bone ossification around implants at the lateral apical level at 3 and 6 months and at the crest from 3 months to 6 months. Furthermore, the immediate functional loading of implants resulted in a significantly greater degree of bone demineralization at the alveolar crest from the time of implant placement up to 3 months compared with immediate nonfunctional loading.

**Keep up with the pace of change in pediatric restorative dentistry!**

**Asli Topaloglu Ak**  
Ege University, Turkey

Caries tissue removal has been done by rotary instruments with different speeds for a long time. It has been revealed that, rotary instruments, cavity preparations based on extension for prevention and Black principles can result with loss of healthy dental tissue and tooth in the long term. This led the researches focus on new caries removal concept that prevents healthy dental tissues which is named as minimal invasive approach. At the same time and at the same speed, restorative materials have evolved as the demands have changed over the course of time. Currently, pediatric dentists are confronted with many choices available in the market as well. However, sometimes it is hard for them to decide which material to use in different clinical situations. Remarkable developments in GIC resulted in wide range of alternatives for clinical applications such as resin modified glassionomers (RMGIC), high viscosity glass ionomer cements (HVGIC), nanoionomers and glass carbomer cements, and with claims of improved physical characteristics. On the other, compomers, composite resins are still the most esthetically desirable materials. No mixing, light polymerization and one step adhesive systems combine for their highly rated ease of use. A better understanding of the components and the strengths and weaknesses of each category of materials offers the opportunity to select the right material for the right situation. In this lecture, definitions of these materials, a general description of their contents and usage-selection criteria will be discussed.