space for ceramic layer. Such complications may be observed in the following cases like: small dental crowns, some vertical dental and dento-alveolar migrations which leads to shifting the occlusal area and tooth lapping by decreasing the height of the crown, in cases of total and subtotal defects of the crown which are followed by migration of antagonists. The proposed method of treatment using modified dowel-cores (with the occlusal depression) can compensate the insufficiency of the surface and height of the abutments by increasing both the retention zone and the contact surface with the future prosthetic construction. In conclusion we underline insufficient dimensions of prosthetic abutments in different clinical situations create difficulties in prosthetic treatment and often compromise prosthetic construction; - the usage of dowel-cores with occlusal depression increase contact surface and retention with future prosthesis; - due to particularities of this modified dowel-core it is possible to increase the space for ceramic layer; - advantages of using the modified dowel-cores prevail its disadvantages, therefore, the herewith proposed method permits to solve the space and surface deficiency accrued in the prosthetic treatment of the special clinical situations as described, without loosening the root support.

Changes of Peri-Implant Crestal Bone Dependent on Crest Module Positioning with Flapless Surgery

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Analyzing de changes of cortical bone around endosseous implants depending on crest module insertion with flapless surgery. Methodes: 98 relationships of medial and distal sides of 49 submerged two-piece endosseuse implant were studied in vivo on mandible and maxilla after insertion by a non traumatic flapless surgery method between the years 2008-2009. After first and second operational stage panoramic radiographies were made and scanned for computerized analysis with "Corel Draw" program. Resoults: Radiographies showed after first stage that crestal module had 4 different relationships with cortical bone on medial and distal sides of each implant. The medial and distal relationships were as follow: Medial 15.3% at cortical level, 12.24% subcortical 1.0 mm, 10.2% subcortical 1.01 mm and 12.24% above cortical bone. Distal: 14.28% at cortical level, 12 .24% subcortical 1.0 mm, 5.1% subcortical 1.01 mm and 18.36% above cortical bone. After 3 months at mandible and 6 months at maxillae, changes of peri-implant crestal bone showed a significant statistical priority ($p < 0.05$) on distal side with above cortical bone relationship at first stage, with mean bone apposition of 0.173 mm. Medial relationships didn't show any statistical differences. The mean peri-implant changes on medial side were as follow: (-0.257mm) at cortical level, (-0.332mm) sub cortical -1.0 mm, (-0.562) sub cortical 1.01 mm and (+0.232) above cortical bone. The mean peri-implant changes on distal side were as follow: (-0.687mm) at cortical level, (-0.777mm) subcortical 1.0 mm, (-2.198) subcortical 1.01 mm and (+0.173) above cortical bone. Conclusions: as much as implants were inserted towards sub-cortical, bone loss is increasing. Positioning implants within the thickness of de gingiva or above cortical bone, contributes to bone apposition. Different crestal module positioning with flapless surgery does not influence the outcomes of peri-implant bone changes. The probability of positioning crest module above crestal bone with flapless surgery are higher on distal side, while on medial side probability is greater that a cortical level will be achieved.