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Short Communication

Planning and realization of complete arch on implant, step by step: About two cases

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The loss of all the teeth is a considerable physical and moral handicap. To replace them is a challenge that must take into account different parameters like the vertical dimension, the squelletic class, the occlusion, the aesthetics, the time factor, and the precision. This is why the dental surgeon must bring all these qualities of surgeon, engineer, technician to succeed these cases to perfection, and in other use the new tools that become essential like planning with software and the 3D printer. This is what will be exposed in these two cases to facilitate the daily life of the dentist. Full arch implant supported restorations are documented to possess high success rates. Several mixtures of materials are used for this sort of restorations like metal alloy-acrylic, metal alloy-composite, and metal alloy-ceramic. However, complications as well as broken or boned acrylate resin teeth, wear of opposing surfaces, ceramic breaking, issue in shade matching of acrylic and pink ceramic, lack of passive match, and in depth work for repair once framework breakage have inspired dentists to appear for different material choices. The employment of oxide for frameworks is associate degree choice that has been projected. Zirconium dioxide may be a material that has shown redoubled quality in up to date dental medicine. Several studies have shown glorious physical, mechanical, biological, and chemical properties of this material. Fastened dental prostheses were designed and processed in a very one-piece oxide substructure and veneering ceramic ware was then directly laid-off onto the substructure. Still, some reports have documented veneering ceramic fractures and fractures of the oxide substructure. To beat these issues, CAD/CAM one-block processed monolithic oxide was introduced as another for the treatment of implant supported full arch reconstructions. The fabrication of the structure in one block reduces breakage prospects and avoids breaking. Moreover, high strength, smallest occlusal adjustment, and accuracy area unit a number of its benefits. Short-run obtainable knowledge indicates that full contour oxide framework is often used with success in implant dental medicine. Clinical knowledge during this study was obtained from the implant info (ID) within the Ashman Department of Periodontology and Implant dental medicine at the big apple University School of dental medicine. This dataset was extracted as American state known info from the routine treatment of patients within the department. The ID was certified by the workplace of Quality Assurance at NYUCD. This study is in compliance with the insurance movability and responsibility act (HIPAA). Patients that remarked the big apple University Ashman Department of Periodontology and Implant dental medicine in would like of prosthetic full arch fastened reconstruction in upper jawbone, mandible, or each were consecutively hand-picked. The inclusion criteria enclosed patients a minimum of twenty one year's previous, with toothless upper jawbone and/or jaw and a minimum of four to 9 implants required to be placed and Osseo integrated. Fourteen patients met the inclusion criteria. Every subject handpicked for this study from the ID had undergone the fabrication of monolithic oxide frameworks for full arch implant supported reconstructions. Twelve of those patients needed jaw and articulator full arch reconstruction, and 2 concerned solely the jaw arch.

Within the 2 jaw reconstructions the opposing dentition was in one patient natural teeth and a set corrective and within the different an entire articulator plate. A complete of twenty-six toothless arches was restored: fourteen jaw and twelve articulator arches. Patients knew concerning the prosthetic protocol, risks, and alternatives of treatment. All complications once delivery was recorded at every follow-up visit up to three years. Failures were outlined as any defect within the restorations that needed the fabrication of a brand new restoration like fracture and misfitting. Complications were outlined as any defect within the restorations that needed repair by laboratory technicians or correction of clinicians like breaking of veneers and screw loosening (clinician). Improved clinical performance is often expected to be achieved by victimisation monolithic oxide restorations. Clinical studies have shown redoubled values of strength and toughness for monolithic oxide compared to oxide frameworks with laminate veneering. It's conjointly been shown to lead to high standards of esthetics and a reduced quantity of metal utilized in the Rima. Full arch monolithic oxide restorations have shown similar overall survival when put next with high-Nobel alloy-based metal ceramic restorations. No bulk fractures or failures within the framework had been reported within the literature with a follow-up of eight years. The results of the current retrospective case series is in accordance with these trends as no flaws within the monolithic framework occurred throughout the follow-up examinations. Many totally different complications are associated with the employment of hybrid prostheses with implants, like fractures of metal framework and gold alloys over five years and fracture or wear of acrylic teeth because of poor bonding of acrylic to the framework.

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