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Changes in the Edetulous Maxilla in Persons Wearing Different Mandibular Overdentures

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Statement of the problem: Does mandibular overdenture create a similar biomechanical situation to distal extension partial denture on edentulous maxilla and induce a condition similar to combination syndrome? Purpose: This study examined the prevalence of maxillary changes in patients wearing mandibular overdenture and the different possibilities to avoid such changes through splinting of anterior overdenture abutments or by placing a posterior implant on each side to improve the occlusal scheme. **Materials and methods:** Fifteen patients with mandrbular two canines, were selected and categorized into three groups according to the type of support; a group received overdenture supported by dome shaped canines another group received overdenture supported by two coped canines splinted by a bar and a third which received overdenture supported by two coped canines and two endosseous posterior implant. Evaluation was done in terms of; fit of the maxillary denture, anterior maxillary soft tissue thickness and changes in maxillary alveolar bone height. **Results:** The study revealed; better maxillary denture fit, less redundant soft tissue and Iess bone height reduction of the maxilla when the natural two canines were splinted or when posterior implants were added for support of the mandibular overdenture. **Conclusion:** Where an anterior tooth supported mandibular overdenture is planned, some form of stabilization of the maxillary arch must also be considered. This would take the form of either a splint bar overdenture or bilateral posterior implants.