

## ***The effect of two different solitary attachments used to retain implant assisted mandibular distal extension removable partial overdenture on abutment alveolar bone height changes***



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### ***Abstract***

The main objective of this clinical comparison study was to compare between different designs of solitary attachments used to retain implant assisted mandibular distal extension RPD regarding alveolar bone height changes around abutment teeth.

**Methods:** Twelve patients with mandibular Kennedy Class I were selected for this study. The remaining natural teeth were extended from the first premolar on one side to first premolar on the other side. One implant was placed in each first molar region bilaterally. The removable partial dentures were retained anteriorly by RPA clasp design and posteriorly either by ball attachment (group I) or by OT-equator attachment (group II). Alveolar bone height changes around the primary tooth abutments were radiographically evaluated using cone beam volumetric CT.

**Results:** Regarding bone loss around the primary abutment teeth, ball attachment group ( $0.72 \pm 0.15$ ) significantly ( $p$  value=0.008) showed less crestal bone resorption when compared to OT-equator attachment group ( $1.01 \pm 0.25$ ).

**Conclusion:** Within the limitation of this study and regarding the preservation of abutment teeth, the use of ball attachment may be the suitable choice for anchoring distally extended removable partial denture to dental implants with improved longevity of the natural tooth abutments.



### ***Biography:***

Ahmed Abosabaa has completed his Bachelor's degree from the Faculty of Dentistry, Tanta University in 2009. He became a member of the Royal College of Surgeons of Edinburgh in 2012 after passing MFDS exam and completed Master's degree in Prosthodontics from Mansoura University in 2018 which is based on implant assisted partial overdentures.

### ***Speaker Publications:***

1." Cardioprotective role of GTS-21 by attenuating the TLR4/NF-κB pathway in streptozotocin-induced diabetic cardiomyopathy in rats", Archiv für Experimentelle Pathologie und Pharmakologie/ 10 August 2020

2." Co-processing of nateglinide with meglumine for enhanced dissolution rate: In vitro and in vivo evaluation", Drug Development and Industrial Pharmacy/ 06 Sep 2020

3." Adults oral health status of Lapta district in Turkish Republic of Northern Cyprus", Journal of Marmara University Institute of Health Sciences/August 31, 2020

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