

**Project No** : 4004/2009

**A COMPARATIVE EVALUATION OF THE EFFICACY OF ANCHORAGE  
REINFORCEMENT BETWEEN MINI IMPLANTS AND CONVENTIONAL  
ANCHORAGE METHODS IN ORTHODONTIC MANAGEMENT OF  
BIMAXILLARY DENTOALVEOLAR PROTRUSION CASES – A PRELIMINARY  
STUDY**

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**OBJECTIVES**

1. To evaluate the efficacy of mini implant as anchorage reinforcement method along with other conventional methods for anchorage reinforcement

**METHODOLOGY**

All bimaxillary protrusion cases reporting to the orthodontic centre at AFMC between Apr 2009 and Sep 2009 were included in the study. The original sample consisted of 57 subjects. From this group 50 subjects based on the inclusion and exclusion criteria were selected and alternately allocated to Group I – the conventional anchorage group or Group II – the orthodontic implant group. The data was obtained by clinical assessment of the implants and by cephalometric analysis of all subjects

**RESULTS**

Significant retraction was achieved in all cases with good vertical control. The anchor loss for maxilla in Group I was 2.00+-0.65mm (28.08%) and in Group II it was 0.20+- 0.35 mm (2.86%). The anchor loss for mandible in Group I was 2.10+-0.75mm (30.0%) and in Group II it was 0.20+- 0.35 mm (2.86%). Over all success rate of titanium Ol's in the present study was 95.24%. There was no statistical difference in the mean treatment time for patients treated with orthodontic implants for anchorage enhancement as compared to the patients provided with conventional anchorage (21.76+- 1.54 months).

**CONCLUSION**

It can be concluded that, with proper patient and implant selection, implants as anchorage for en-masse retraction can be incorporated into orthodontic practices with complete success. The use of orthodontic implants for anchorage is a viable alternative to conventional molar anchorage.