

**Different Approaches to Intrusion of Incisors:  
Clinical Evaluation and Comparison of Mini-Screw Implants  
versus Intrusion Arches**

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By

**FADI ABDULLA ALI SAAD AL-HUMAM**

B.D.S.(1998), M.D.S (2008)

Orthodontic and Pediatric Dentistry Department,

Faculty of Dentistry

Ain-Shams University

Faculty of Dentistry

Ain-Shams University

2012

## **Supervisors**

### **Dr. Hamdy Hafez ELZahed**

Professor of Orthodontics, Chairman of  
Orthodontic and Pediatric Dentistry Department

Faculty of Dentistry

Ain Shams University

### **Dr. Khaled Mustafa Fawzi**

Professor of Orthodontics,  
Orthodontic and Pediatric Dentistry Department

Faculty of Dentistry

Ain Shams University

### **Dr. Ibrahim Mazen Negm**

Lecturer of Orthodontics,  
Orthodontic and Pediatric Dentistry Department

Faculty of Dentistry

Ain Shams University

تحت إشراف

أ.د/ حمدي حافظ الزاهد

أستاذ تقويم الأسنان

رئيس قسم تقويم الأسنان وطب أسنان الأطفال

كلية طب الأسنان

جامعة عين شمس

أ.د/ خالد مصطفى فوزي

أستاذ تقويم الأسنان وطب أسنان الأطفال

كلية طب الأسنان

جامعة عين شمس

د/ ابراهيم مازن نجم

مدرس تقويم الأسنان

قسم تقويم الاسنان و طب اسنان الاطفال

كلية طب الأسنان

جامعة عين شمس

٢٠١٢

## **SUMMARY and CONCLUSIONS**

This prospective randomized clinical trial study was carried out to clinically evaluate and compare the intrusion effectiveness and efficiency of mini-screw implants versus conventional CIA intrusion arches on the maxillary incisors and other skeletal, dentoalveolar and soft tissue structures from cephalometric measurements in an attempt to highlighten their ideal clinical implication.

In addition to the main aim, this study was also sought to assess and evaluate the amount of root resorption caused by the two different intrusion modalities and investigate the correlation between duration of maxillary incisors intrusion and root resorption via the aid of 3D cone beam computed tomography. Furthermore, the changes in the vertical and horizontal position of maxillary incisors were assessed by 3D models superimposition of the pre-intrusion and post-intrusion CBCT.

The sample in this study consisted of twenty Egyptian females each exhibiting an anterior deep overbite with either Class I or Class II malocclusions.

The subjects were equally and randomly divided into two groups; Group A (Mini-screw implants group) whose mean age was  $20.9 \pm 2.6$  years, and Group B (Connecticut intrusion arch CIA) whose mean age  $21.2 \pm 2.2$  years. For each subject a standard full set of orthodontic records were taken, in addition to a 3D CBCT pre-intrusion (T1) and post-intrusion (T2).



علم الإنسان ما لم يعلم

عَلَّمَ الْقُرْآنَ



# *Dedication*

*To the Sole of My Father.....*

*To My Mother.....*

*My Wife & Son.....*



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