

There is a Silent Iatrogenic Epidemic Brewing

A Inadvertent Calamity Caused by the Confluence of Two Very Common Orthodontic Appliances - Class II Elastics and Lower Aligners...

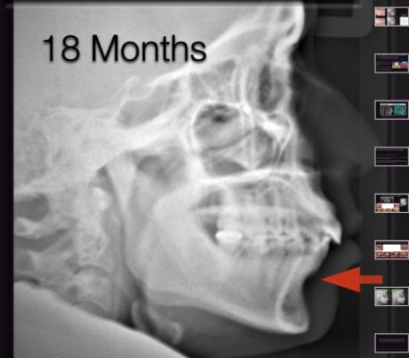
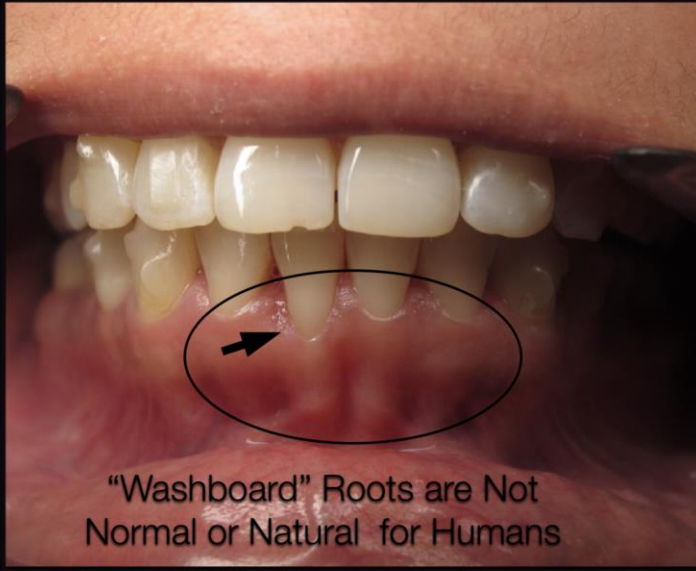


Meet A A, 35 year old female

- She was concerned about her Overjet & Lower Jaw shape
- But declined Jaw Surgery, Braces or Upper Extractions
- We settled on Upper IPR, Aligners and Class II elastics



AA - Progress at 18 months



A A at Debond



- The Class II elastics were stopped. The aligners were refined with Lingual Root torque of Lower Anteriors
- The Labial Root Prominence and Recession both improved

Another example from another Clinic...

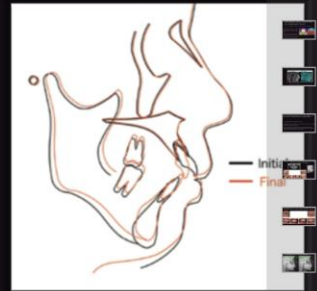


This patient had a Lower Incisor Extracted and still managed to push the other incisors off the bone with Faithful Class II Elastic Wear

Or this, from a recent journal ...



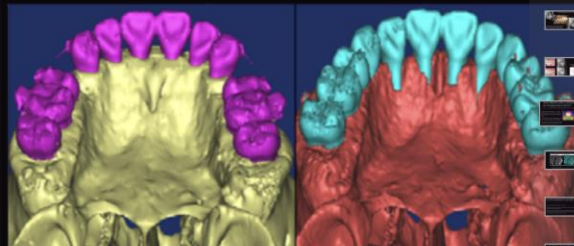
"Artistic Licence" or Deliberate Deception?



What Happens when Cortical Borders are Transgressed by Roots?*

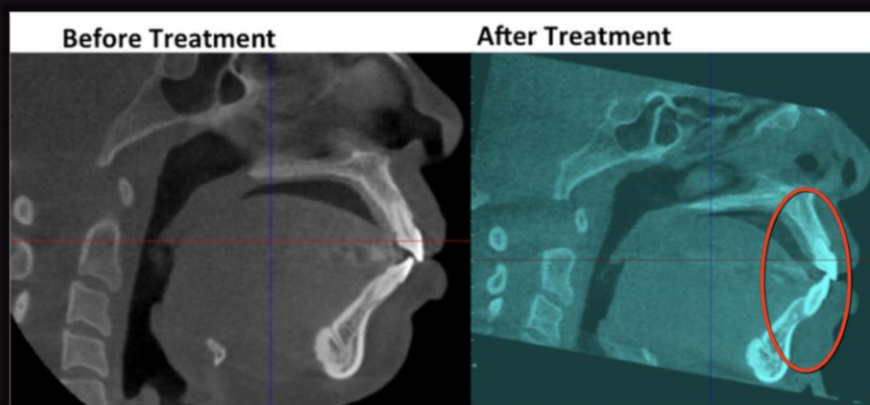
*Guo et al. / J Zhejiang Univ-Sci B (Biomed & Biotechnol) 2011 12(12):990-997

- This article showed Average 27% Palatal Bone Height loss when TADs were used to Retract Upper Incisors Through the Palatal Cortex
- The same phenomenon likely happens when lower anteriors transgress the labial plate
- We finally have a way to Keep Lower Incisors "Upright" with Long term Class II elastic use
 - And The Result can be Tragic ...



Here is another Example from a recent UCSF CBCT study*

*Hoang et al. Progress in Orthodontics :(2016)1722 DOI 10.1186/s40510-016-0135-z



- Patient treated with Full Fixed Appliances
- Witness the full expression of a MBT type prescription on a well compensated skeletal Class II
- Significant Root Resorption in addition to Housing Violation

If you apply Class II Elastics with Lower Aligners; Look out for this! The Manifestation is Unpredictable...

- Lower Aligners maintain Lower Anterior Inclination
- Class II Elastics with Lower Aligners can then Advance the Incisor Roots out of the Labial Border of the Alveolar Housing
- Natural Compensation of Class II Skeletons involves Retoclination of Upper Incisors Crowns and Proclination of Lower Incisor Crowns while Keeping Apices Safely Centred in their respective Alveolar Housings

How about an Extreme Example of Natural Compensation?

L G; Severe Skeletal Class II; Family declined surgery: She was treated with Upper 7 Extraction and CrossBow



She did not grow much in 12 months, Dental Compensation and Occlusal Plane Rotation were primarily responsible for the Class II correction



LG -12 Months of "Extreme" Natural Compensation

But she would have looked **very different** with Carriere, Class II elastics and a Lower Essix or Aligners...



Class II elastics combined with Clear Overlay Appliances
have a strong propensity to position the lower incisors
anteriorly (and unnaturally) outside of the Alveolar Housing

It is time we wake up to this Epidemic ...before it's too late...