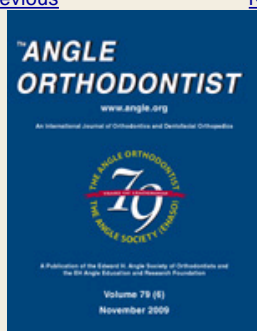


Volume 79, Issue 3  
(May 2009)
[◀ Previous Article](#)   [Volume 79, Issue 3 \(May 2009\)](#)   [Next Article ▶](#)
[< Previous](#)   [Next >](#)
[Add to Favorites](#)   [Share Article](#)   [Export Citations](#)   [Track Citations](#)   [Permissions](#)

[Current Issue](#)  
[Available Issues](#)
[Full-text](#)[PDF](#)

Rasha Al-Abdwani, David R. Moles, Joseph Harold Noar (2009) Change of Incisor Inclination Effects on Points A and B. The Angle Orthodontist: Vol. 79, No. 3, pp. 462-467.

Original Articles

## Change of Incisor Inclination Effects on Points A and B

Rasha Al-Abdwani<sup>a</sup>, David R. Moles<sup>b</sup>, and Joseph Harold Noar<sup>c</sup>

### Abstract

**Objective:** To identify and evaluate changes in the cephalometric position of points A and B due to an incisal inclination change caused by orthodontic treatment.

**Materials and Method:** A total of 103 pairs of consecutive pretreatment and posttreatment lateral cephalographs that met the inclusion criteria were systematically collected from the departmental database and digitized using a customized software program (Gela). Repeatability analyses showed good reliability and no evidence of bias. A statistical model was generated using a Generalized Estimating Equation approach to analyze the data accounting for growth and bodily movement because both factors influence the position of points A and B ( $P < .001$ ,  $P < .001$ ). Changes in tooth length were also accounted for, as these changes may influence the calculated position of the centroid ( $P = .002$ ).

**Results:** Each 10° change in the maxillary incisor inclination results in a statistically significant average change in point A of 0.4 mm in the horizontal plane ( $P = .028$ ). Each 10° change in the mandibular incisor inclination results in a borderline statistically significant average change in point B of 0.3 mm in the horizontal plane ( $P = .058$ ). There were no significant changes in the vertical position of points A and B.

**Conclusion:** The effects of incisal inclination changes, due to orthodontic treatment, are of no clinical relevance to the position of point A and B, even though they may be statistically significant. The validity of points A and B as skeletal landmarks generally holds true, and accounting for treatment changes is unnecessary.

**Keywords:** [Cephalometrics](#), [Incisal inclination](#), [Orthodontics](#)

Accepted: July 2008;

<sup>a</sup> Graduate Student (MS), Department of Orthodontics, UCL Eastman Dental Institute, London, UK.

<sup>b</sup> Senior Clinical Lecturer, Department of Health Services Research, UCL Eastman Dental Institute, London, UK.

<sup>c</sup> Consultant and Honorary Senior Lecturer, Department of Orthodontics, UCL Eastman Dental Institute, London, UK.

Corresponding author: Dr Rasha Al-Abdwani, Department of Orthodontics, UCL Eastman Dental Institute, 256 Gray's Inn Road, London WC1X 8LD, UK. ([toothfairy999@hotmail.com](mailto:toothfairy999@hotmail.com))



### Journal Information

ISSN: 0003-3219

Frequency: Bimonthly

### Register for a Profile

Not Yet [Registered?](#)

Benefits of Registration Include:

- A Unique User Profile that will allow you to manage your current subscriptions (including online access)
- The ability to create favorites lists down to the article level
- The ability to customize email alerts to receive specific notifications about the topics you care most about and special offers

[Register Now!](#)

## Related Articles

### Articles Citing this Article

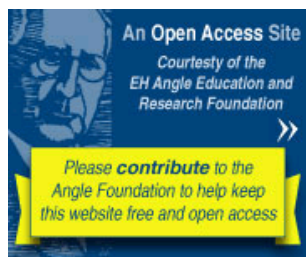
[Google Scholar](#)

### Search for Other Articles By Author

- ⊖ Rasha Al-Abdwani
- ⊖ David R. Moles
- ⊖ Joseph Harold Noar

### Search in:

jo Angle Online



top ▲