

Use of 3D models of teeth for teaching in dental anatomy

Beatriz Trevisan (IC), Angelo Bertolino Marcheto (IC), Alexandre R. Freire (PQ), Ana Cláudia Rossi (PQ), Felipe B. Prado (PQ).

Abstract

This study presented a 3D model of the human tooth created from the study of the Dental Anatomy Atlas and natural teeth for to contribute to the teaching of anatomy in Dentistry.

Key words: morphology, anatomy, digital teach.

Introduction

In Dentistry, the emphasis to the study of head and neck anatomy, mainly focusing on the teeth, it is essential to understand the different areas of this profession. In teaching and research, human teeth should be studied in detail. The teaching in the Universities has evolved with the introduction of digital tools that enable three-dimensional understanding of craniofacial and dental anatomy¹.

The aim of this study was create a three-dimensional (3D) model of the human upper incisors tooth to assist as teaching material in dental anatomy classes.

Results and Discussion

In this study, the central incisor modeling activity for learning the shape and tooth structures was performed in Rhinoceros 3D 5.0 software (McNeel & Associates).

The Image 1 shows the 3D model of the upper central incisor, which will be used in theoretical undergraduate classes of Dental Anatomy to assist in the teaching and study.

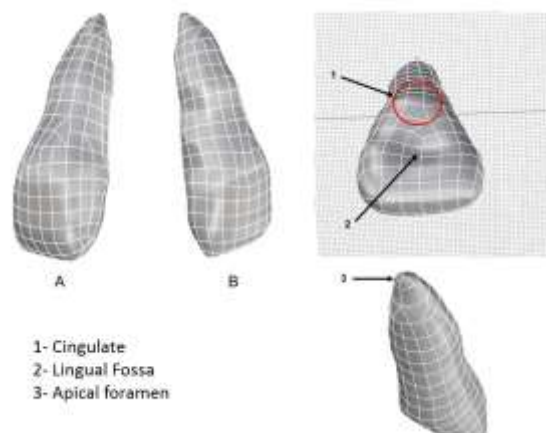


Image 1. A: Disto-buccal face of the upper central incisor; B: Mesio-buccal face of the upper central incisor. Rhinoceros 3D 5.0 (McNeel & Associates) software.

Conclusions

The 3D model of the tooth studied contributed to the performed of a new approach to the teaching of dental anatomy.

Acknowledgement

The authors are grateful to the National Counsel of Technological and Scientific Development (PIBIC-EM-CNPq) for financial support.

¹ Sun, W.; Starly, B.; Nam, J.; Darling, A. *Comput Aided Design*. **2005**, *37*, 1097-1114