

## - Oral Presentation 60

**TITLE: Digital smile design: a useful tool for a predictable and conservative treatment**

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### Introduction

Computer design software have become one of the main tools between the interdisciplinary team and between the dentist and patient, being useful in the design and planning of cases.

Following established aesthetic parameters and incorporating technology, the clinician can plan predictably smile design cases and communicate the expected results to the patient and prosthetist.

### Case report

45 year-old woman, attended to the dental clinic unsatisfied with the color of her teeth wishing to enhance her smile. During the clinical examination inverted smile and giroversion of 2.2 was observed.

Analysis of the case with Digital Smile Design program was made which helped to make a diagnostic wax up. The vertical dimension was increased by placing occlusal composites on 4.5, 4.6, 4.7, 3.5, 3.6, 3.7 (Spectrum TPH3, DeTrey Dentsply Konstanz, Germany). A preparation for feldspathic veneers was performed, from 1.5 to 2.5 and from 4.5 to 3.5 using a mock up. Veneers were fabricated using CAD / CAM and pressed ceramic feldspathic (Noritake, Japan) and bonded with adhesive Prime Bond NT (Dentsply DeTrey Konstanz, Germany) and light-cured resin cement (Calibra, Dentsply DeTrey Konstanz, Germany).

### Conclusions

The knowledge of aesthetic parameters and the use of a Digital Smile Design program, allowed the planification of predictable and conservative dental restorations, achieving the aesthetic and functional needs of the patient.

## - Oral Presentation 61

**TITLE: Variations in the internal anatomy of mandibular first premolar by using CBCT**

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### Objectives

Endodontics studies the prevention and treatment of pulp disease and apical periodontitis. The key lies in cleaning and sealing all canals system so it is essential to know its anatomy. Our goal is to review the anatomy of mandibular first premolars trying to reduce the high rate of relapses and failures.

### Materials and Methods

We collect images from Cone -Beam Computed Tomography (CBCT ) with the aim of studying the anatomy of mandibular first premolars in a population of Galicia, Spain , between May 2010 and May 2013. Images were taken with Planmeca Romexis system (Asentajankatu, Helsinki, Finlandia) with the following parameters: 120 kV, 20.27 mA, exposure time between 8.9 and 14.7 seconds and voxel size from 0.25 to 0.30 mm.

We analyze 162 mandibular first premolars of 97 different patients attending the Faculty of Dentistry, University of Santiago de Compostela requesting implant treatment, orthodontics or endodontics. . We analyze the number and configuration of the roots, the number of canals by root and configuration of the canals by Vertucci's classification. An informed consent is given to all patients to be signed to join the study and inclusion criteria of the sample set.

### Results

The percentages by classification are as follows : Type I: 67.9 % , Type II : 1.23 % , Type III : 5.55 % ; Type V : 21.6 % , Type VI: 3.09% and Type VII: 0.62 %.

### Conclusions

The highest percentage of premolars are Type I, followed by type V. Type IV and Type VIII showed no prevalence in the sample.