



Degenerative joint disease: from a conservative to a minimally invasive approach – clinical case

Mariana Alberto, Pedro Cebola, João Rua, Maria Braz de Oliveira, André Maria de Almeida & José João Mendes

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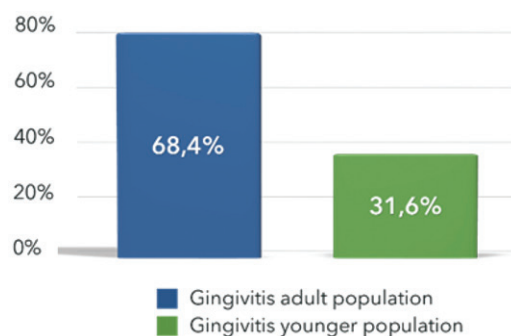


Figure 2. Prevalence of gingivitis among the population.

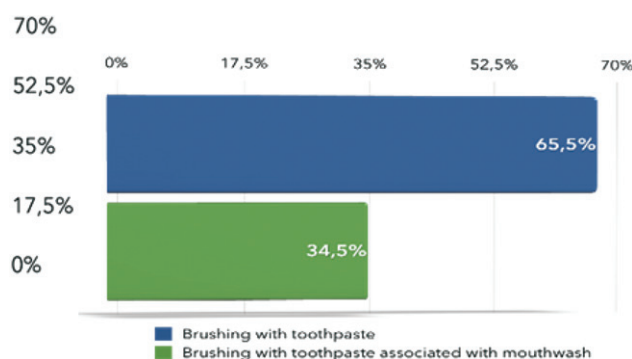


Figure 3. Prevalence of oral hygiene habits among the population.

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Mariana Alberto^a, Pedro Cebola^a, João Rua^{a,b}, Maria Braz de Oliveira^a, André Maria de Almeida^{a,b} and José João Mendes^{a,b}

^aInstituto Universitário Egas Moniz (IUEM), Egas Moniz Cooperativa de Ensino Superior, Caparica, Portugal; ^bCentro de Investigação Interdisciplinar Egas Moniz (CiiEM), Egas Moniz Cooperativa de Ensino Superior, Monte de Caparica, Caparica, Portugal

ABSTRACT

Introduction: Degenerative joint disease is a subtype of temporomandibular derangements. It can be characterised by possible progressive cartilage degradation, subchondral bone remodelling, and chronic inflammation in the synovial tissue [1]. For the treatment of temporomandibular disorders, minimally invasive techniques, such as viscosupplementation, should normally be applied after more conservative techniques [2].

Materials and methods: Female patient, 22 years old, with probable disc displacement with occasional blocking and bilateral degenerative joint disease. Before starting any treatment, the patient was asked to sign an informed consent.

Diagnosis was made through the symptom questionnaire and clinical exam integrated on the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) protocol [3] along with imagiological exams. Definitive diagnosis was disc displacement with occasional blocking, bilateral degenerative joint disease, bilateral arthralgia, masseter myalgia and bruxism self-report.

On a first approach we did behavioural and cognitive therapy, viscosupplementation with hyaluronic acid 1.5% of high molecular weight (Syaloset 2000[®]), anterior repositioning splint drawn and printed with CAD-CAM technique (Exocad dentalCAD[®]) and physiotherapy exercises, like manual therapy for muscular relaxation and condylar distraction, as well as, at-home physiotherapy exercises.

For evaluate if there were any improvement on function, comfort and quality of life the OHIP-14 questionnaire [4] was applied

before and after the viscosupplementation and again, after 1 month of the occlusal splint use. The same thing was done with the DC/TMD protocol.

Results: According to the OHIP-14 questionnaire, before treatment the patient mainly referred the articular pain that she felt during mastication. After the first viscosupplementation session and the new OHIP-14 questionnaire application, the patient referred substantial improvements on the pain during function. However, she expressed her concerns with the expectations of the treatment. After 1 month of occlusal splint use her concerns were gone and pain during function did not come back.

Discussion and conclusions: Disc displacements should be carefully evaluated before the prescription of an anterior repositioning splint. However, in cases like this, they are indicated [5]. In this case, viscosupplementation was used in the beginning of treatment to allow the TMJ to recover function without limitations and restoring a dynamic lubrication. Treatment of TMJ dysfunctions should be conservative and always multidisciplinary.

CONTACT M. Alberto ✉ mariana.alberto22@gmail.com

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Prevalence of imperfect amelogenesis cases in a paediatric population of the paediatric dentistry clinic of IUEM

G. Kizi^a, O. Toga^b, A.R. Barata^a, A. Castaño Séiquer^c and I. Ventura^a

^aCentro de Investigação Interdisciplinar Egas Moniz (CiiEM), Egas Moniz Cooperativa de Ensino Superior, Caparica, Portugal; ^bInstituto Universitário Egas Moniz (IUEM), Egas Moniz Cooperativa de Ensino Superior, Caparica, Portugal; ^cFamily and Community Dentistry, Sevilla University, Spain

ABSTRACT

Introduction: The imperfect amelogenesis (IA) is a heterogeneous group of changes that mainly affect the structure of the enamel. It can occur in the deciduous and permanent dentition and presents a variation of phenotype, associated or not to a syndrome [1,2]. The aim of this study is to evaluate the prevalence of IA in patients who were observed for the first time in the Egas Moniz University Clinic and to describe which teeth are most affected. Variables such as sex, age, oral hygiene, diet and DMFT index (decay-missing-filling-teeth) were evaluated. DMFT index was analysed in order to determine if in the presence of enamel changes, correct oral hygiene and low sugar diet, the DMFT index remains high, to determine if the enamel changes have an impact on dental caries in the absence of external factors.

Materials and methods: The study was approved by an Ethics Committee of Egas Moniz and a written consent was obtained from all participants. The sample consisted of 100 children who attended Egas Moniz paediatric dentistry, for the first time, over a two-year period (2015–2017). Inclusion criteria were: Children without craniofacial changes and that the parents have signed the informed consent. Data were analysed by using descriptive and inferential methodologies. A significance level of 5% was established in the latter case.

Results: The mean age was 10.2 years, ranging from 6 to 18 years. The majority (55%) was male and 45% was female. Permanent dentition is the most prevalent (52%), followed by mixed (30%) and deciduous (18%). Of the total sample, it was observed 14% of patients with IA. The permanent dentition presents 50% of IA, followed by 42.9% in the deciduous dentition, reducing in the mixed dentition (7,10%). The most affected teeth were the second upper molars with a