7th moip Athens, Greece September 3-5, 2021 Wyndham Grand Hotel
Face Oriented Orthodontics
7th Mediterranean Orthodontic Congress
16th Panhellenic Orthodontic Congress
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PP11

MANAGEMENT OF MISSING MAXILLARY LATERAL INCISORS

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AIM: The aim of the present study is to outlay the possible therapeutic procedures in patients with congenitally missing maxillary lateral incisors and the indications, advantages and disadvantages.

MATERIALS AND METHOD: Three cases treated in a private practice in Athens, Greece with congenitally missing maxillary lateral incisors (CMMLI) will be presented; one with space closure, canine built-ups and reshaping; one with space opening followed by implant placement; and a novel mini-screw supported temporary prosthesis in a case with unilateral agenesis.

RESULTS: In general, two possible solutions are available. One option is orthodontic space closure replacing missing maxillary lateral incisors with canines. The other option is to create adequate space for the prosthetic replacement of the missing lateral incisors. Selecting the appropriate option depends on a number of factors (Table 1,2). In cases of unilateral CMMLI, space opening is often recommended to improve aesthetics and preserve smile symmetry. In cases of bilateral CMMLI space closure and space opening could be both performed.

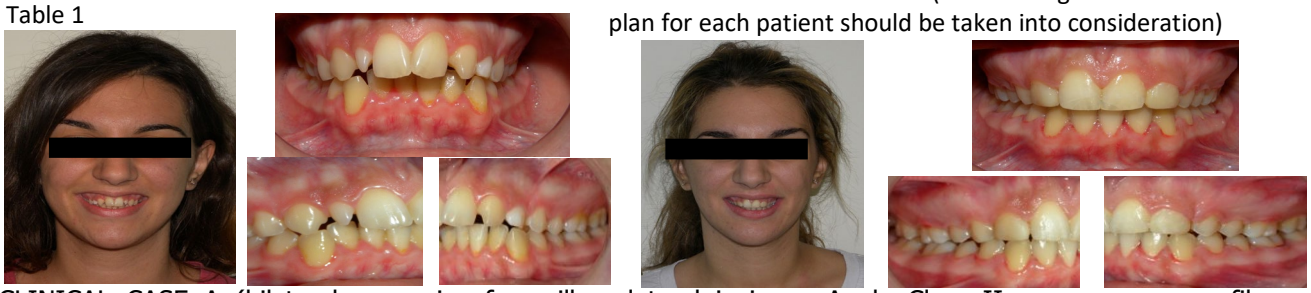
CONCLUSIONS: CMMLI is a frequent occurrence. To achieve optimal occlusion and aesthetics, the orthodontist must take a number of factors into consideration. A multidisciplinary approach is necessary to provide the best possible treatment for the patient.

Factors to consider when deciding on space closure/opening
• Type of malocclusion
• Specific space requirements
• Tooth size/arch length relationship
• Smile esthetics
• Frontal/profile views
• Skeletal pattern
• Patient age
• Canine shape-size-color

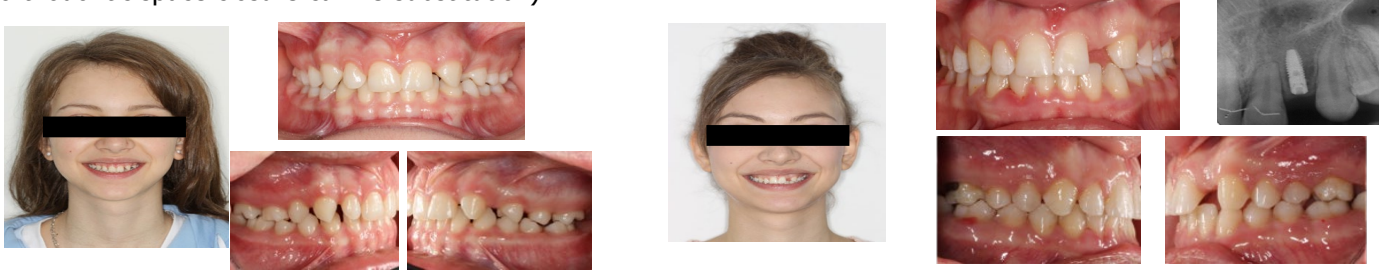
Table 1

Condition	Treatment
Low angle patients	Space opening
High angle patients	Space closure
Class II relationship	Space closure
Class I/III relationship	Space opening
increased overjet-reduced overbite	Space closure
Reduced overjet- increased overbite	Space opening

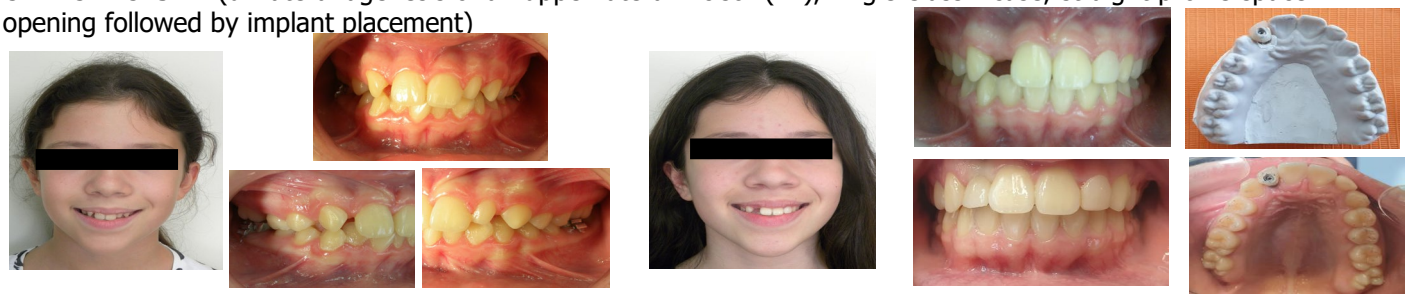
Table 2 Treatment indications (Formulating an individualized treatment plan for each patient should be taken into consideration)



CLINICAL CASE A (bilateral agenesis of maxillary lateral incisors, Angle Class II case, convex profile-orthodontic space closure-canine substitution)



CLINICAL CASE B (unilateral agenesis of an upper lateral incisor (22), Angle Class I case, straight profile-space opening followed by implant placement)



CLINICAL CASE C (unilateral agenesis of an upper lateral incisor(12), one micro lateral incisor (22), Angle Class I patient, straight profile - space opening followed by a temporary mini-screw supported prosthesis and then permanent implant placement)

REFERENCES: Zachrisson B, Rosa M, Toreskog S. Congenitally missing maxillary lateral incisors: Canine substitution *Am J Orthod Dentofacial Orthop.* 2011;139:434-445 ,Beyer A., Tausche E., Boening K., Harzer W. Orthodontic space opening in patients with congenitally missing lateral incisors. Angle Orthod. 2007, Managing congenitally missing lateral incisors, part 1: Canine substitution. *J Esthet Restor Dent.* 2005 ,Treatment options for congenitally missing lateral incisors, Kiliaridis S, Sidira M, Kirmanidou Y, Michalakis K.Eur J Oral Implantol Sabri R. Management of missing maxillary lateral incisors. J Am Dent Assoc. 1999 , Araujo E.A. , Oliveira D.D. , Araujo M.T. Diagnostic protocol of missing maxillary lateral incisors. World J. Orthod. 2006 , Tuverson D.L Orthodontic treatment using canines in place of missing maxillary lateral incisors. Am. J. Orthod. Kokich VG, Kinzer GA .