Missing Lateral Incisors: Space Closure versus Space Opening and Prosthetic Replacement.

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**Introduction:** The incidence of congenitally missing lateral incisors has been found to occur in 1% to 2% of the population. Two treatment options are available for such cases. The first treatment option is to place the maxillary canine into its natural positioning the dental arch and open a space for prosthetic replacement of the missing lateral incisor, the second option would be to replace the missing lateral incisor with the canine after reshaping. Each treatment option has its advantages, and disadvantages. The orthodontic literature has an ample amount of articles discussing this important topic; nevertheless, most of these articles are based on case reports and expert opinions. Thus, the Aim of the present research was to conduct an evidence based study in a two fold manner: Firstly, to assess the attractiveness of both treatment options among lay persons, and orthodontists, and secondly to examine in a retrospective manner a sample of 30 patients with missing lateral incisors treated equally by both treatment options, from a periodontal, esthetic, occlusal stability and temporomandibular joint health perspectives. The results of the first fold will be presented.  

**Methods:** The esthetic assessment was carried out by using photographs of cases with space opening and prosthetic replacement with Maryland bridges, cases with space closure and canine substitution after reshaping, and cases with no missing lateral incisors. The subjects rated each case as regards the shape, color and symmetry on a scale from 1-5 for each series of 7 bipolar adjectives. Each photograph was given a total score from 5 (the best) to 35 (the worst) for each item. ANOVA statistical test was used for the analysis of the gathered data.  

**Results:** The results showed that the lay persons first preference was the space closure followed by space opening, as for the orthodontists, the same was true except that their first preference was the cases with no missing lateral incisors.  

**Conclusion:** Conventional space closure for missing maxillary lateral incisors seems to be the most esthetically pleasing procedure especially aided by further improvements by orthodontists in tooth reshaping and positioning and progress in restorative treatment.