

Increasing Efficiency of Orthodontic Treatment by Using Gummetal Arch Wires and Ceramic Zirconium Restoration with Laser ND-YAG for Fixation

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Abstract : New technology such as laser and alloys have greatly contributed to the orthodontic industry. In this article, we will investigate and compare two important scales in orthodontics: Arch wire and bonding system; Gummetal is a new wire successfully used in clinical application in orthodontic, and their differences with other arch wire was significance. Background: Currently, finding the most effective method to treat a complex case in orthodontics in such a way that it has the least damage to the enamel tissue and the most efficiency has been one of the daily issues in the orthodontic industry, which has attracted the attention of dentists, orthodontists, and also patients. Methods: The review of article is made up by searching in different journals with related topics, we analyzed different subjects in this review. Results: The number of literary references that we identified during the literature in this review is 56. After excluding publications we removed the topics they weren't match, the total number of articles included in the systematic review was determined to be 13. Conclusions: The flexibility of Gummetal compared to other archwires is indicative of the unique difference of this product with the rest of the products. It is correct to use a metal bracket, which is less aesthetically pleasing than a ceramic bracket, but in this article, we are looking for finding the best and most effective method for treating complex cases, using laser and ceramic zirconium for brackets and using Gummetal will increase the efficiency of our braces system.

Keywords : archwire, Gummetal, metal bracket, methods, zirconium ceramic, semi-material

Conference Title : ICDOH 2025 : International Conference on Dentistry and Oral Health

Conference Location : Honolulu, United States

Conference Dates : January 09-10, 2025