

Opinion Article

Modern Methods for Controlling the Anterior Torque During Retraction

Balzar Aline*

Department of Orthodontics, University of North Carolina, North Carolina, United States

ABOUT THE STUDY

In orthodontic therapy, controlling the anterior roots' torque is a critical concern. It permits the typical interincisal angle to remain stable, which in turn serves to maintain soft tissues, providing a pleasing face profile. In addition to preventing tooth migration, recession, fenestration, or dehiscence in the front portion of the dental arch, the torque discussed here is important for maintaining a healthy periodontium.

In the majority of cases, the treatment of moderate-to-severe dental crowding, bi-maxillary protrusion, high-angle, or Class II patients necessitates mechanically regulating the incisor root torques. Premolar extraction is typically required for these malocclusions, followed by canine retraction. The incisors are particularly vulnerable to uncontrolled tipping, specifically retroclination or lingual tipping during their retraction, sometimes known as "rabbiting," because of the voids that occur mesially to the distalized canines. The placement of Temporary Intraoral Skeletal Anchorage Devices (TISADs) that enable group distal movement of the "social six" (en-masse retraction) or the placement of a microimplant between the maxillary incisors have all been suggested as ways to control the torque during the retraction of the anterior teeth in order to avoid this side effect. Despite the range of methods supporting root-torque control during space closure that have been published, physicians almost completely rely on their own experiences to judge how effective these methods are.

Therefore, the objective of this systematic review was to establish which of the investigated approaches deserves the highest recommendation for clinical practice by evaluating the effectiveness of various approaches to controlling torque of the maxillary incisor roots during their orthodontic retraction.

Due to the meticulous, exacting randomization procedures used in those investigations, the risk connected with randomization was regarded as low in the majority of articles. Because randomization was not carried out in a fully objective manner but rather by individual selection of patient eligibility based on met criteria, the risk of bias in their article was moderate. Due to the use of opaque, sealed envelopes or other analogous randomization techniques, the risk of disclosing the group assignment was deemed minimal in all RCTs.

Both study participants and doctors were familiar with the various treatment modalities used and their variations. Before receiving treatment, patients completed a consent form and were informed of their involvement in the trial. As a result, it was unable to blind participants and staff to treatment status, and a high risk of bias was assigned to that criterion. There are numerous alternative techniques for controlling torque during anterior retraction, but the majority of them have not undergone thorough analysis, therefore their effectiveness has not been thoroughly verified. The present systematic review indicates that not all efficiency differences between torque control strategies are statistically significant. The torque control techniques in this systematic review with the highest statistically demonstrated efficacy should be the centre of attention.

The technique for corticotomy may be crucial for torque control; specifically, incisions should be made on both the vestibular and palatal sides; when incisions were made only on the vestibular side, no statistically significant difference in torque loss was obtained compared to that of controls. Corticotomy is used to reduce the lingual tipping of the maxillary incisors during retraction.

Correspondence to: Balzar Aline, Department of Orthodontics, Department of Orthodontics, University of North Carolina, North Carolina, United States, E-mail: aline.b@gmail.com

Received: 28-Nov-2022, Manuscript No. DCR-22-19259; Editor assigned: 01-Dec-2022, Pre QC No. DCR-22-19259 (PQ); Reviewed: 15-Dec-2022, QC No. DCR-22-19259; Revised: 22-Dec-2022, Manuscript No. DCR-22-19259 (R); Published: 30-Dec-2022, DOI: 10.35248/2161-1122.22.12.614.

Citation: Aline B (2022) Modern Methods for Controlling the Anterior Torque During Retraction. J Dentistry. 12:614.

Copyright: © 2022 Aline B. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.