SKELETAL ANCHORAGE AND ALVEOLAR CORTICOTOMY TO SOLVE DENTAL TRANSPOSITIONS

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Introduction.
Dental transpositions are those dental anomalies where two teeth exchange their position in the arch. Until the end of the last century, literature tended to advice to keep the teeth in the transposed order. With the introduction of the skeletal anchorage by means of mini-screws, the possibility to apply forces in more favourable directions and the evolution of the surgical procedures for alveolar corticotomy to enhance the orthodontic tooth movement, treating and solving dental transposition cases has become feasible.

Aim.
This poster shows how the most common dental transposition cases may be solved by the use of Temporary Anchorage Devices (TADs) and segmental corticotomy. In addition to them, the use of pre-torqued brackets together with extended bracket bases may give the possibility to move the roots of the transposed teeth in a safer way.

Methods.
The 3D diagnosis and proper biomechanical planning are the key to success. The miniscrews must be placed in the right position and at the right time. Alveolar corticotomy is another key to allow proper and safer movement of the roots.

Results.
All the dental transposition cases presented have been treated successfully with excellent final outcomes. The association between the use of miniscrew implants and segmental corticotomy has considerably shortened the treatment time to manage dental transposition cases.

Conclusions.
New treatment protocols as the one showed can substantially change the viewpoint in the treatment of challenging malocclusion as dental transposition.

References.

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