

Orthodontic treatment of linear scleroderma en coup de sabre under methotrexate therapy – a case report.

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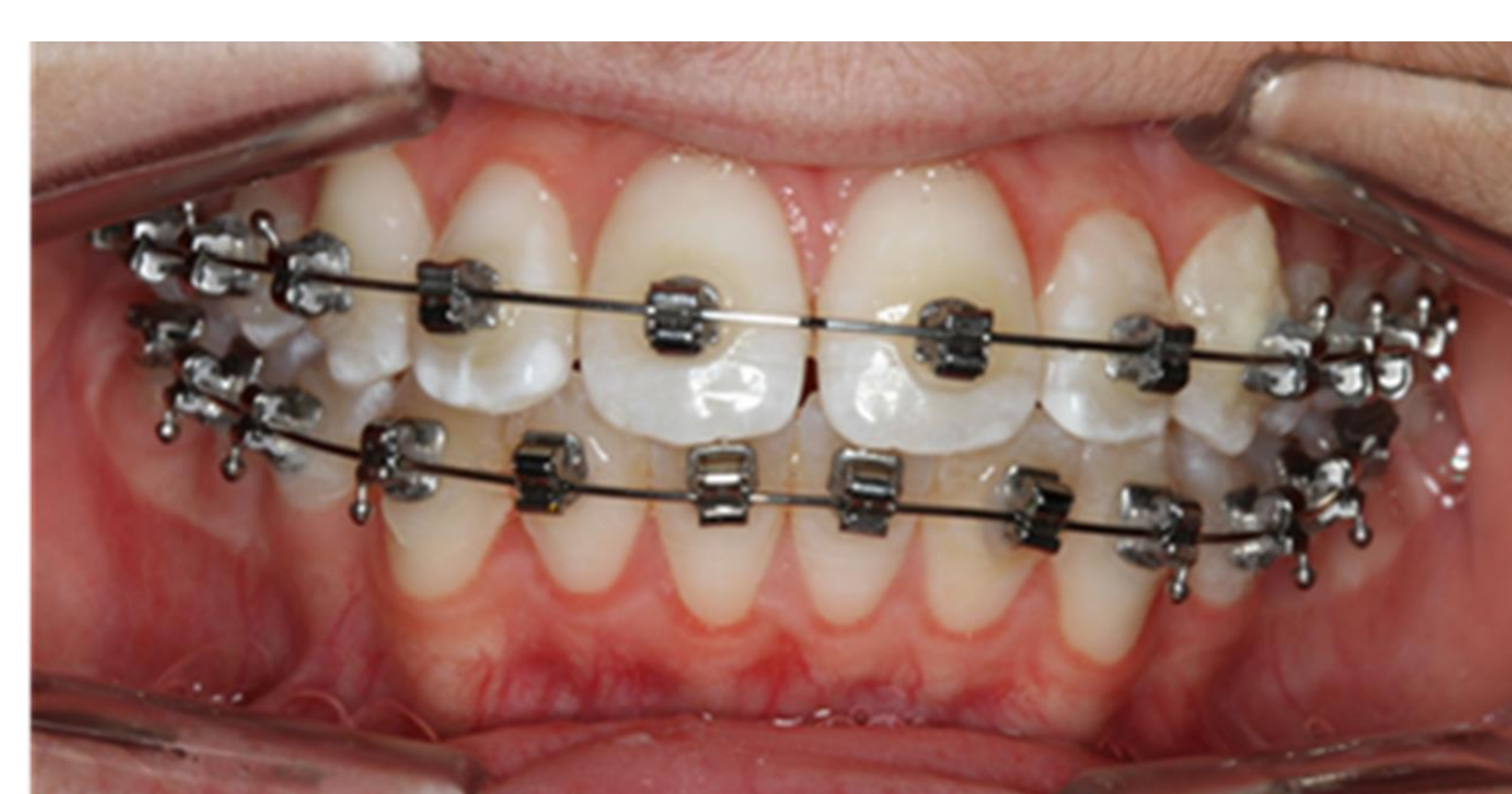
Background

Linear scleroderma en coup de sabre (SCS) is a rare disease in which dense collagen deposition occurs on the head frequently in the forehead and scalp resembling the stroke of a sabre.

Oral manifestations can also occur. In some cases, gingival tissues and tongue are atrophic, eruption of teeth can be affected and the craniofacial growth may be disturbed.

The atrophy of the localized subcutaneous tissue can cause, in active growing children, deformity and a progressive hemifacial atrophy and asymmetry of the face.

In orthodontic treatment, methotrexate (MTX) may influence the inflammatory response following force application, reducing the pace of bone remodeling and thereby tooth movement.



Case Report:

An eleven year old boy diagnosed with SCS and under MTX treatment (20 mg per week) was referred for orodental diagnosis and orthodontic treatment. The SCS skin lesions affected the left side over the forehead, the left orbit and the chin on the left side. Clinical and radiographic examination showed normal gingival and dental structures. Dentoalveolar findings included Class I molar and canine relationship in both sides and moderate crowding in the maxillary and mandibular arch. Orthodontic treatment was performed with fixed appliances and no extractions.

Follow up:

The patient is now 12-year and 2-month-old and the teeth are aligned (8 months after starting treatment). No apical root resorption was detected on radiographs.

Conclusion

It seems that the progression of orthodontic treatment in SCS under high dose MTX therapy is not delayed and can be uncomplicated.

References:

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- Diravidamani K. et al. Drugs influencing orthodontic tooth movement: An overall review. J Pharm Bioallied Sci 2012 aug; 4(Suppl 2):299-303