



DECIDUOUS TEETH SLICING : A SMART OPTION IN SPACE MANAGEMENT IN CROWDED MIXED DENTITION

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AIM

Mandibular incisor crowding in the mixed dentition is one of the most common problems presenting to the orthodontist. Deciduous teeth slicing optimizes the eruption and alignment patterns of the permanent teeth.

MATERIALS AND METHOD

Treatment protocol for children with lingual displaced lower incisor and lower crowding in the range of 2–4 mm is as first option slicing of the primary canines (6/9 years of age) to reduce their mesiodistal diameter in providing additional space to improve the position of the adjacent permanent incisors and as second option slicing of the mesial surface of the second primary molars (9/12 years of age) to provide additional space for distal positioning of the erupting canine and first premolar.

In this poster we present a 10 years old girl with transposed and lingual displaced mandibular right incisor. The lower crowding is in the range of –3 mm in late mixed dentition. Since most of the leeway space is located in the size difference between the second primary molar and second premolar area, control of molar shifting and sustained arch length using a straightwire appliance with lace-back and mesial slicing of the second primary molars allowed alignment of crowded lower incisors.



RESULTS

The disking of the mesial corner of the second primary molars (8.5) provides a leeway space (p1.7-mm) for the lingual positioned incisor to slide forward under the muscular pressure of the tongue and under the forces of the straightwire appliance. Long-term dental health benefits of early mandibular incisor alignment are described in a case with 19 years follow-up.

19 years follow-up



CONCLUSIONS

Treatment procedures that influence the eruption patterns and positioning of the permanent teeth during the transition from the primary dentition through the mixed dentition allowed alignment of crowded lower incisors. Prudent labial movement of the lingual displaced incisors may actually increase the midline arch length and overall arch circumference as the arch form is rounded out in a forward direction by the action of the tongue.