TITLE:

INTRUSIVE EFFECT ON MOLAR USING MINISCREWS

BACKGROUND:

Supraeruption of the maxillary molar due to the early missing of mandibular molar is the most common scenario faced in our day to day practice. Molar intrusion can be achieved effectively with the mini screws implants placed bilaterally and with the minimum force level of 150 grams on either side. In this study we have evaluated the amount of intrusion and root resorption taken place in the supra erupted upper first molar, in a month period of time.

MATERIALS AND METHODS:

9 patients with the supra erupted molars due to the missing of the opposing mandibular molar were selected for this study. Mini screw implants from Taiwan Orthodontics were used with the dimension of 1.4x8mm. Implants were placed bilaterally and molars were banded with the buccal tube and lingual buttons and E-Chains were used for the force application. The force level of 150 grams was given on either side. E-Chains were changed every 15 days to initiate activation. After the duration of 1 month the radiographs were obtained by the standardized methods and they were evaluated with the Digora Software. Pre and post intrusion values were statistically analyzed and the results were obtained.

RESULTS:

Mean intrusion achieved by this method was 1.07mm and the mean root resorption found at the end of one month intrusion was 0.28mm in the mesiobuccal root, 0.24mm in the distobuccal root and 0.33mm in the palatal root.

CONCLUSION:

This study concludes that the molar intrusion can be achieved effectively with less adverse effects to the adjacent tooth and the intruded tooth roots, when the mini implants are placed bilaterally and the minimum force level of 150 grams on either side were used.