



CASE REPORT –

THE COURSE OF TREATMENT OF A CLASS III SKELETAL OPEN BITE CASE AND ITS ANALYSIS

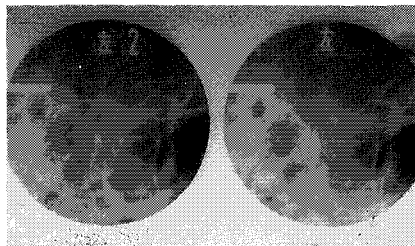
AUTHOR

Etsuko Kondo, D.D.S., D.D.S.C., Tokyo Japan.

The Editor and publisher wish to apologise to Dr Etsuko Kondo for errors in publication of her article in Volume 12, No.4 of this Journal. Photographs on page 230 and graphs on page 232 were incorrectly placed and numbered. These pages are now reprinted.

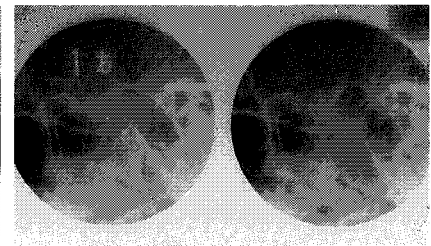
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Left TM joint. 29mm opening. In occlusion.



Before treatment (14Y7M). The condyle is located a little anteriorly in the fossa in occlusion. The top of the left condyle is slightly flatter than the right. The condyle is against the eminence in small degrees of opening.

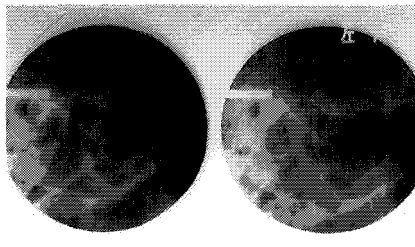
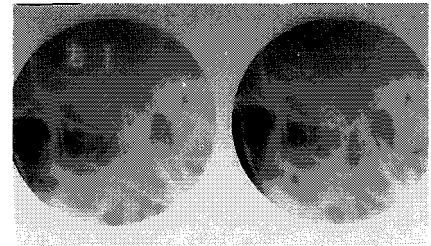
Right TM joint. 29mm opening. In occlusion.



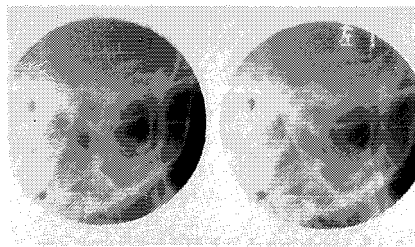
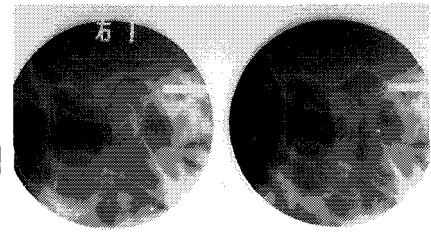
The condyle is positioned slightly posteriorly. The top of the condyle is more round than the left side. The condyle is against the eminence in opening.



3 months into active treatment (14Y11M). As occlusal interferences are eliminated, the difference in condylar position between right and left is no longer observed. Both condyles are almost centered in occlusion. Both condyles are against the top of the eminence in opening. The amount of anterior movement of the condyle is the same on both sides.



6 months after retention (17Y4M). Both condyles are equally positioned in the fossae in both occlusal position and in opening. The condyle is centered in the fossa in occlusion and against the top of the eminence in opening on both sides.



2 years after retention (18Y10M). The joint status is almost the same as 6 months after retention. Both condyles are in synchrony in occlusion as well as in opening. The condyles are almost centered in the fossa in occlusion and against the top of the eminence in opening. Although the patient returned with abnormal occlusal sensation in the molar area, the joint radiographs show no abnormalities.



Fig. 17. Comparison of joint radiographs before and during treatment and after retention. These radiographs of the joints were taken with Model Tx-90 made by Asahi Roentgen Co. The angles of X-ray beam were directed at 0° laterally and 17° superiorly.

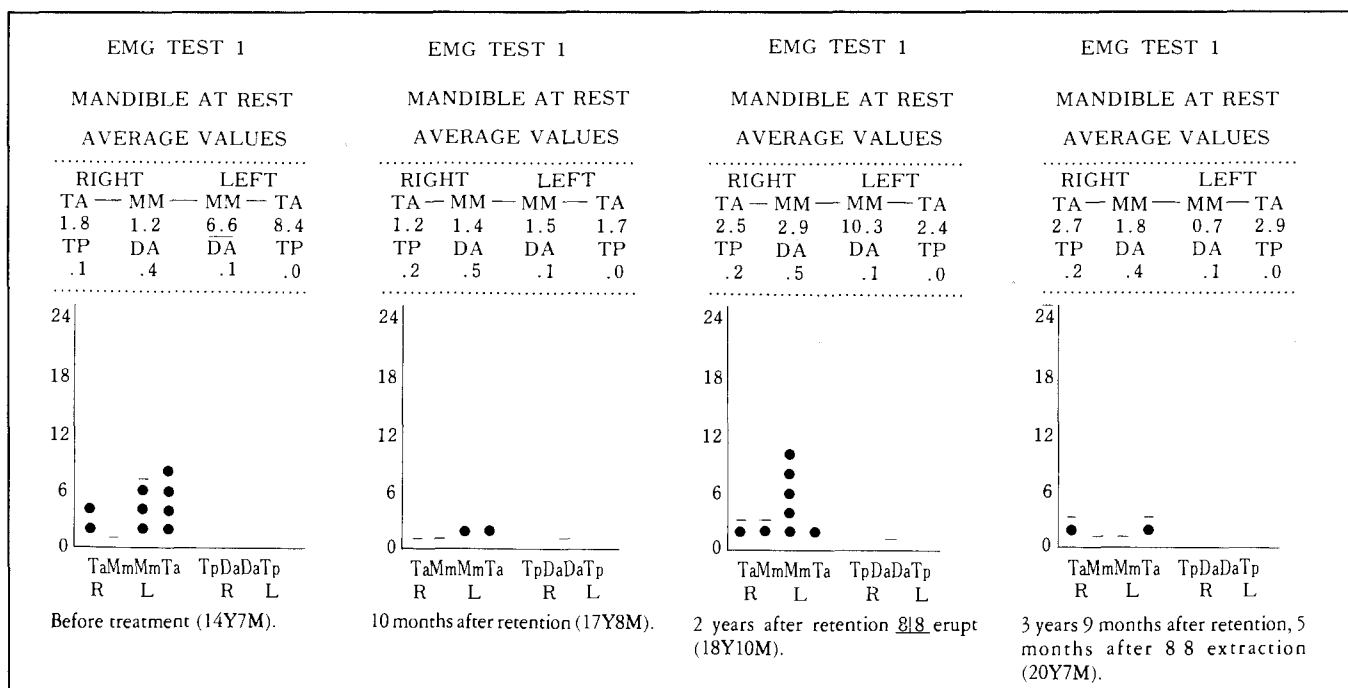


Fig. 19. EMG findings (K6 Diagnostic System). The imbalance of activities of the temporalis and masseter muscles, which were observed before treatment, improved after treatment. However, when the patient came back complaining of abnormal occlusal sensation in the molar area during the eruption of the upper third molars (2 years after retention: 18Y10M), the EMG record shows a high tension in the left masseter. The balance of activities between right and left are very good 3 years and 9 months after retention (5 months after the extraction of the upper third molars), suggesting a stable mandibular position and a stable occlusion after retention.

Rate of Angle Class III Malocclusion

Race	general population	Rate of all the orthodontic patients
Japanese	4~6% (Susami, Enomoto)	2.0% (my office Tokyo)
White	1~4 (Newman, Hotz)	

The incidence of Class III malocclusion among the Japanese is from 4% to 6%, but of all the orthodontic patients, Class III malocclusion accounts for anywhere from 20% to 30%. It has been reported that, in a certain dental office in the northern part of the country, the incidence rate of this type of malocclusion is as high as 55% to 65%.

In Japan we have more Class III patients than any other country of the world. The major reason is that Japanese are brachycephalic and have poor longitudinal maxillary growth. The white-skinned races are more dolichocephalic and have narrow dental arches.

This high incidence rate, as compared with the white race, creates a challenge to the Japanese orthodontist. Needless to say, depending upon how severe the cases happen to be, some form of surgical or orthopaedic operation is jointly used with orthodontic treatment.