Case Report

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This was a Class II, Division 2 case of a 13 year, 11 months old boy. There was a deep overbite. There was some crowding in the mandibular incisal area. Observation disclosed the typical crowded anterior section in the maxilla. The maxillary incisors were tipped lingually about 3 millimeters. There was a steep mandibular plane angle which was a bad sign, but with this there was a good chin button of four millimeters. The facial pattern overall would be called poor. This was a nonextraction case.

There were no tongue or lip habits that could be observed. The patient had no physical impediments. He had good color and posture. Caries were medium, the muscle tone in the lip area was good and the breathing was normal. The cephalometric x-ray showed the tonsillar area to be normal and the tongue not malpositioned.

The cause of the malocclusion was infancy sleeping habits. This led to the abnormal eruption of the upper first molars in the Class II relationship. The remaining teeth erupted abnormally after this original bad pattern. The bicuspids, because of this eruption pattern, did not open the bite as they would normally do. The maxillary incisors did not protrude because of the strong upper lip, but were driven lingually on to the lower incisors (Fig. 1).

Treatment was started with a Kloehn-type cervical gear on the maxilla with only the six year molars banded. There was a lingual arch placed on the mandible. The initial treatment plan was to open the bite and retract the maxillary denture with the cervical gear. When spacing occurred and the bite opened, an .018 bracket edgewise appliance was placed on the maxillary teeth. The cervical gear was continued and, as the maxillary incisors became upright, the lower incisors were released and the crowding improved. The mandibular teeth were banded with the same appliance used on the maxilla. A period of Class III treatment was instigated when the edgewise archwire was placed. This treatment was continued until the mandibular arch was aligned and satisfactorily set up. Cervical gear to the maxilla with light Class II traction was then used until the malocclusion was corrected.

Appointments during treatment were every two to three weeks and progress was slow because of poor cooperation. Treatment was generally uneventful and active appliances were in place for twenty-four months.

A maxillary Hawley retainer was placed when the bands were removed. The cervical gear was continued during sleeping hours for six months. The Hawley retainer was worn twenty-four hours a day for six months after which time it was worn just at night. A mandibular cuspid to cuspid was placed. Appointments during retention were every six to eight weeks. The Hawley and the cuspid to cuspid were removed after thirty-one months.

The facial change in the soft tissue was good. The denture was much improved by eliminating the overbite. This overbite correction will save the patient from periodontal problems during adulthood. The follow-up cephalometric x-rays showed a great amount of downward and forward growth during treatment.

This case bears out the fact that

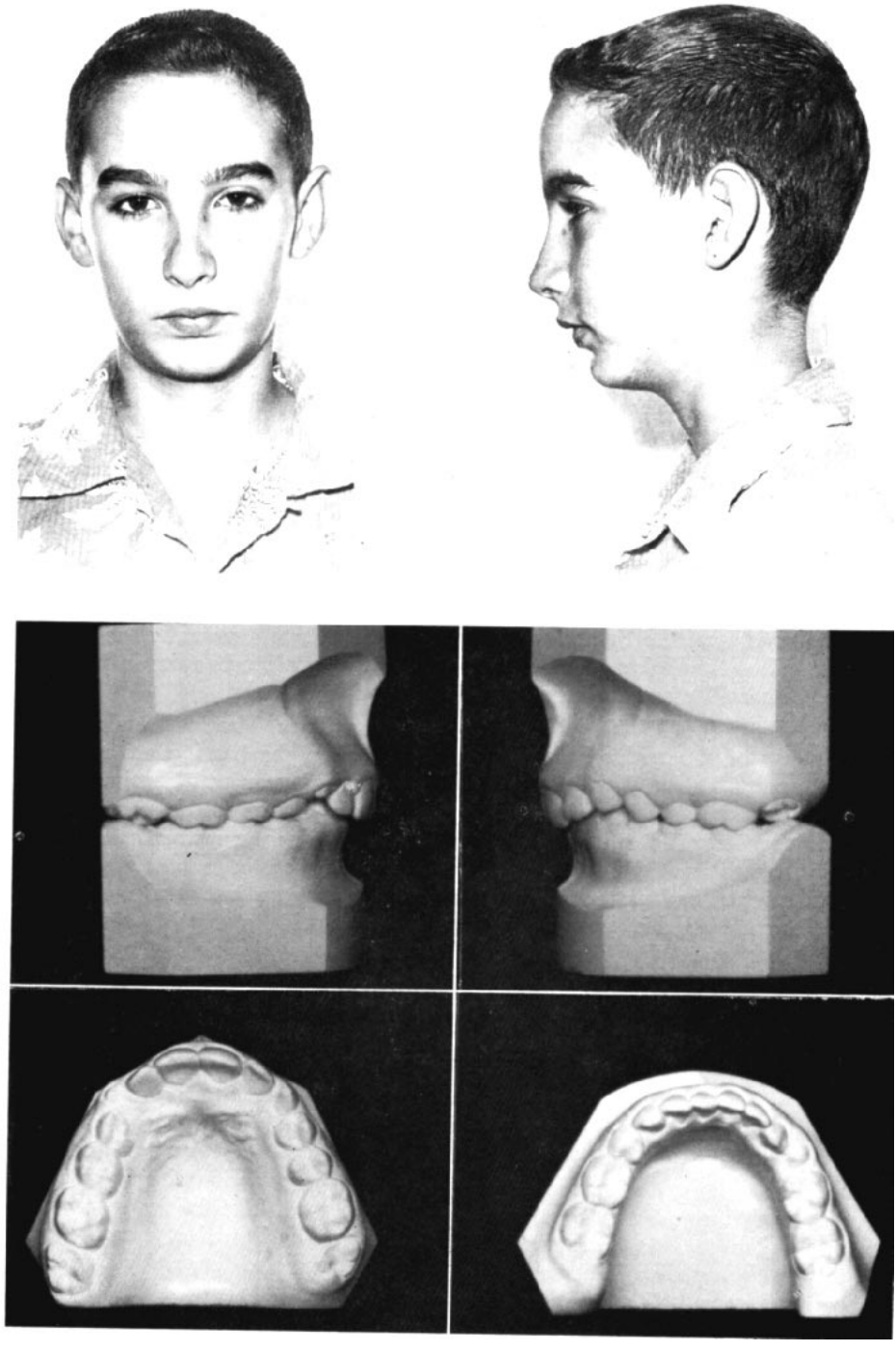

Fig. 1

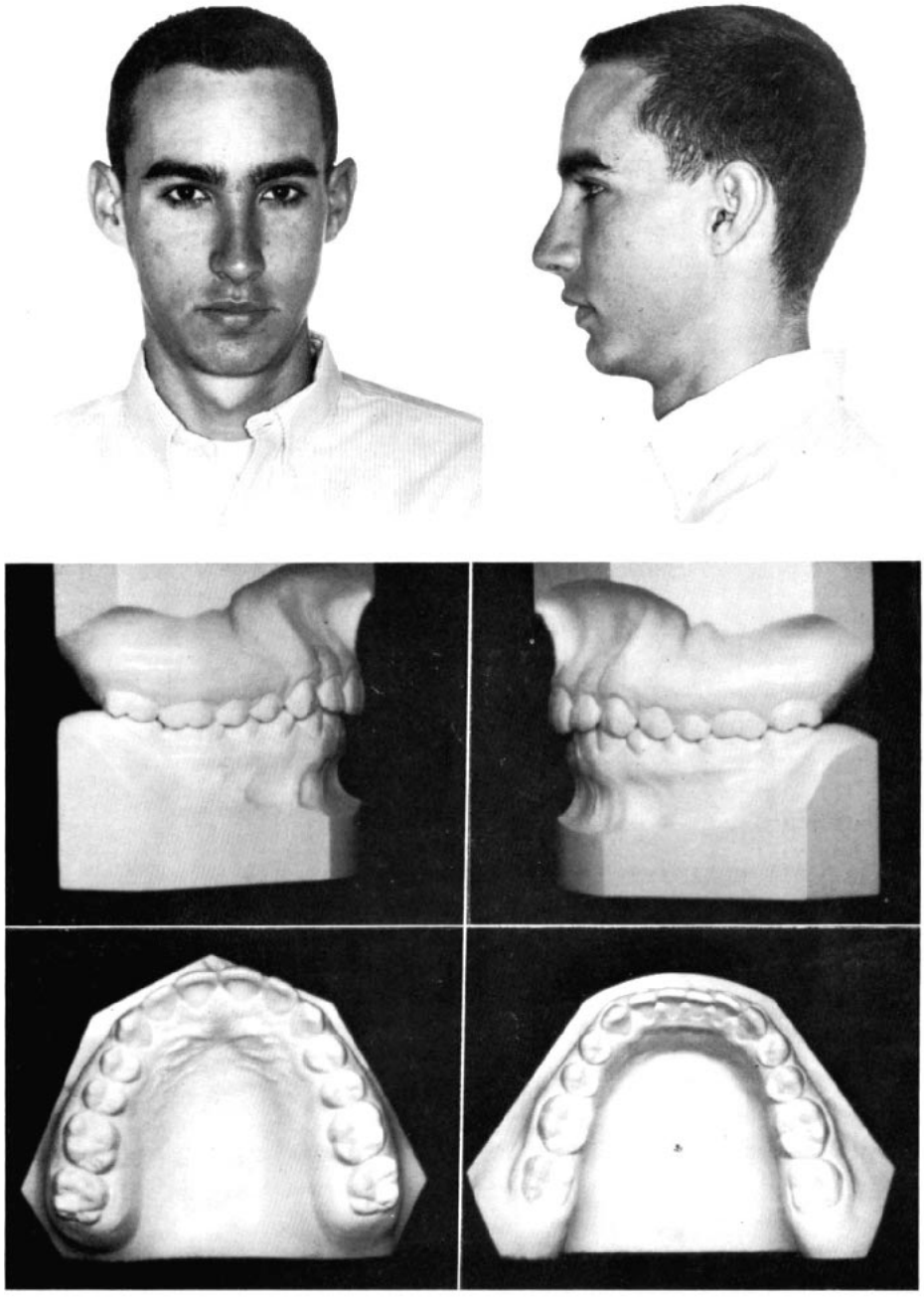

Fig. 2

there are very few, if any, Class II, Division 2 cases which require extraction to complete the work successfully. Although there always seems to be excessive crowding of the lower incisors, this is due to the lingually inclined maxillary incisors that drive the lowers back. There is generally a good mandibular plane angle and a big chin point in Division 2 cases.

After a year out of retention, the overbite and overjet have increased very slightly which was to be expected (Fig. 2). There were some slight rotations in the lower incisor area. The case is stable at this time.

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