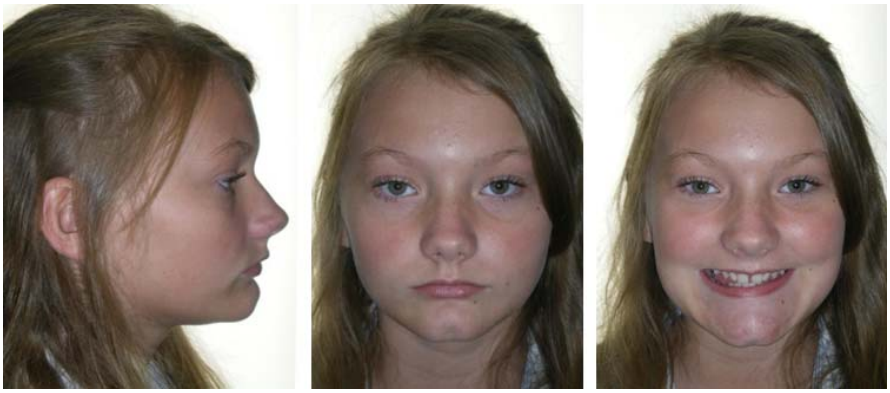
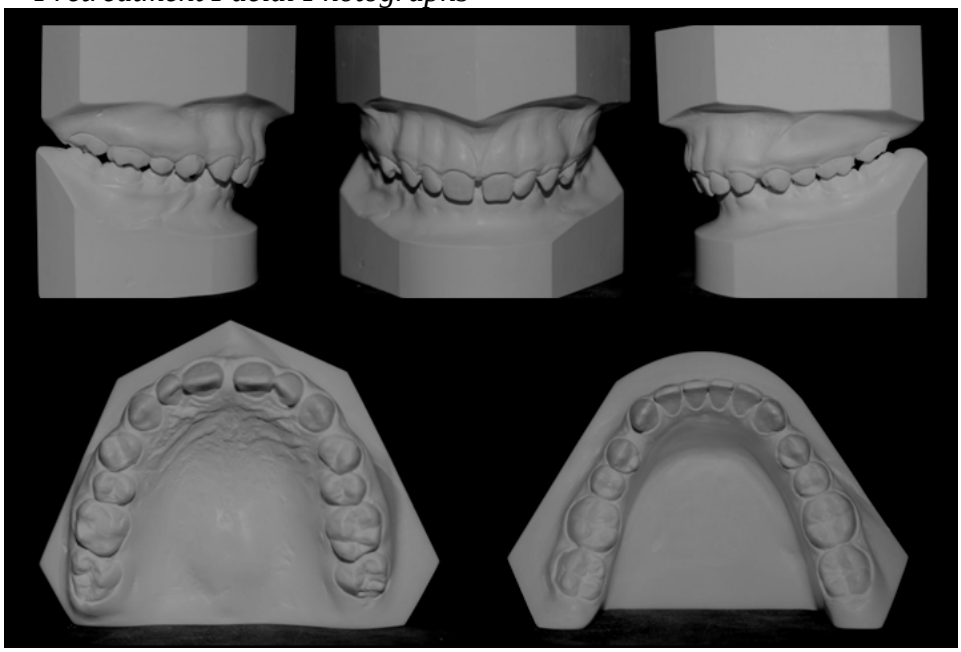
Harlli Silcox

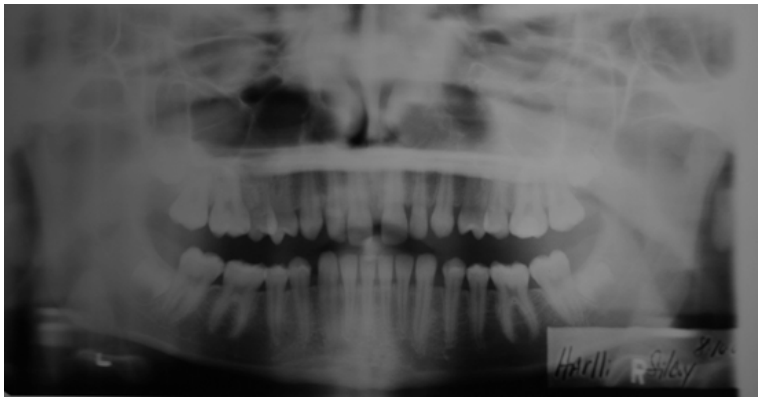
The patient presented for malocclusion correction. There were no medical or dental complications. The etiology of the malocclusion was heredity. Pretreatment facial photographs exhibit a very deep mentolabial sulcus, a prominent chin, and an everted lower lip. The pretreatment casts exhibit a very deep vertical overbite, a Class II dental relationship and maxillary and mandibular anterior spacing. The pretreatment panoramic radiograph reveals a healthy dentition and spacing of the teeth. The pretreatment cephalogram and its tracing confirms a very low mandibular plane angle of 14°, a low occlusal plane to Frankfort angle of 5°, and ANB of 5° and an AO BO of 7 millimeters.



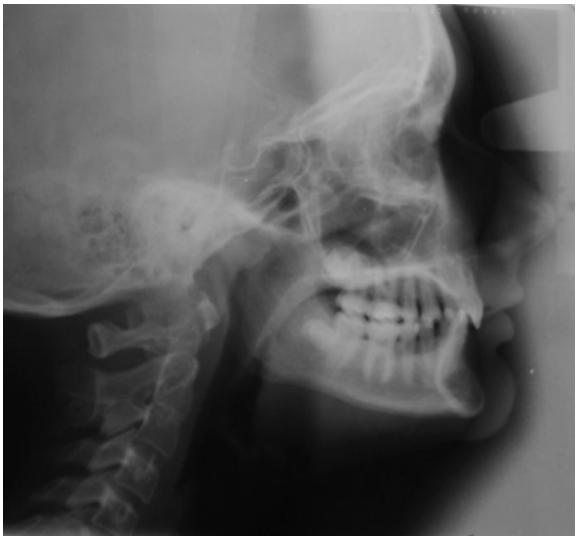
Pretreatment Facial Photographs



Pretreatment Casts

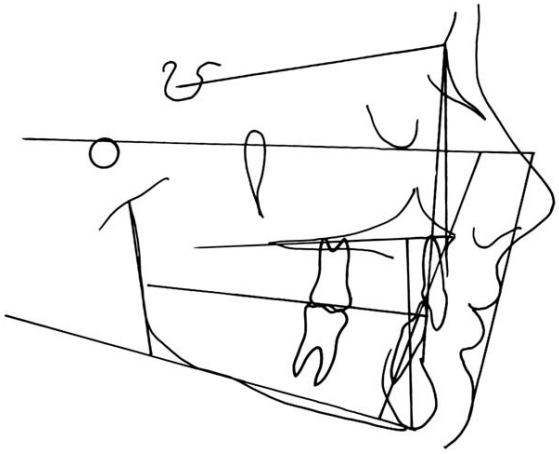


Pretreatment Panoramic Radiograph



Pretreatment Cephalogram

FMIA	71
FMA	14
IMPA	95
SNA	83
SNB	78
ANB	5
AO BO	7
OCC	5
Z	78
UL	16mm
TC	15mm
PFH	44mm
AFH	55mm
INDEX	.80

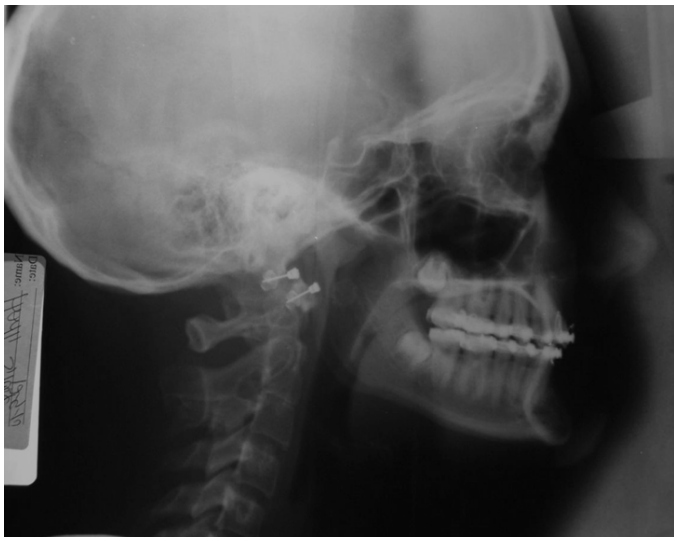


Pretreatment Cephalogram Tracing

The problems the clinician must solve are how do you close all of the spaces, correct the Class II dental relationship and open the deep anterior overbite? Additionally, mandibular incisor position must be maintained because to procline the mandibular incisors would be harmful to the ultimate stability of the correction as well as to facial esthetics.

Treatment Plan and Treatment

Obviously, the patient's malocclusion correction did not require extraction of teeth. The patient was treated with a standard edgewise appliance. J-hook headgear was attached to the maxillary archwire to intrude and retract the maxillary anterior teeth. After the mandibular arch was leveled and "prepared', Class II elastics were worn. The progress cephalogram reveals a mandibular arch that has been leveled and one can see the closing loops in the maxillary arch along with a the hooks for the high pull J-hook headgear. Mandibular third molars, as well as maxillary third molars, were not an issue during treatment. All will probably need to be removed.

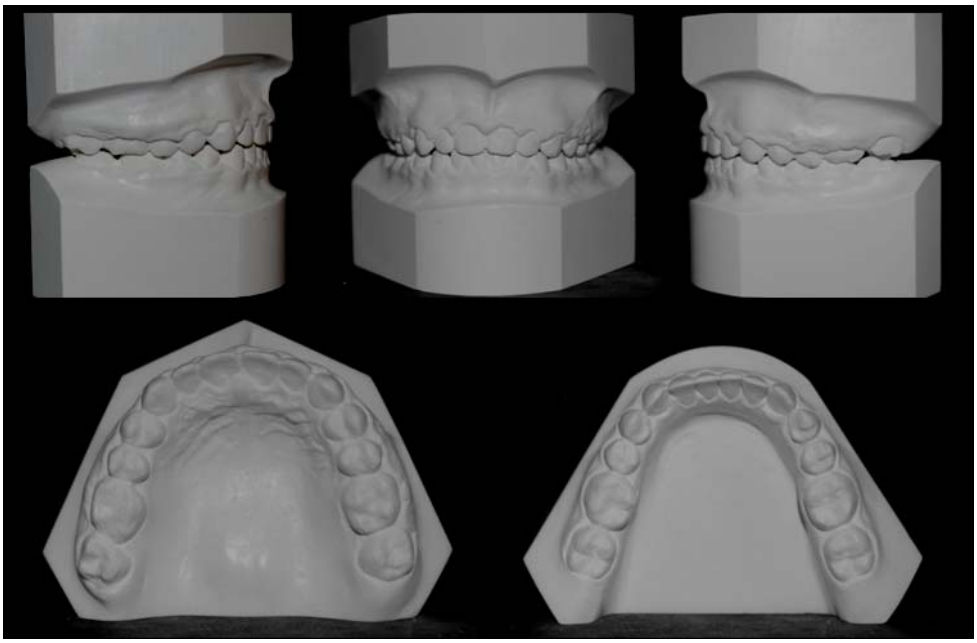


Progress Cephalogram

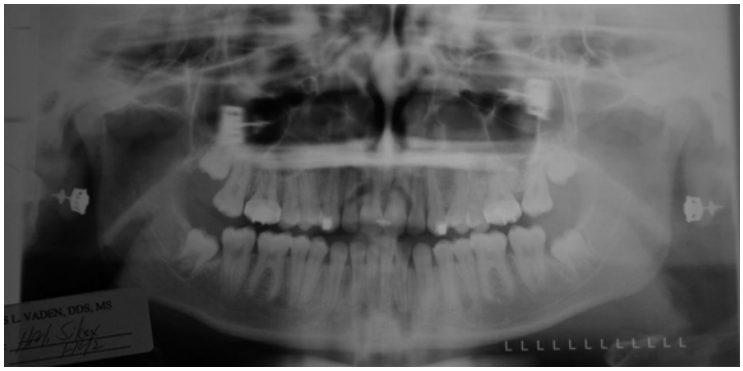
Results

The posttreatment profile and frontal view of the face reveal more balance. There is still a lip eversion issue, but not near as much as there was pretreatment. The posttreatment casts exhibit opening of the deep vertical overbite, a correction of the Class II dental relationship to a Class I relationship, and maintenance of arch form and arch width. Posttreatment panoramic radiographs confirm space closure. Mandibular and maxillary third molars will have to be evaluated as the patient matures. The posttreatment cephalograms and the tracings confirm maintenance of mandibular incisor position, further decrease of the FMA from 14° to 12°, and reduction of the ANB from 5° to 0. The posttreatment superimpositions confirm vertical control and good mandibular growth which improved facial esthetics and facilitation of the occlusal correction.

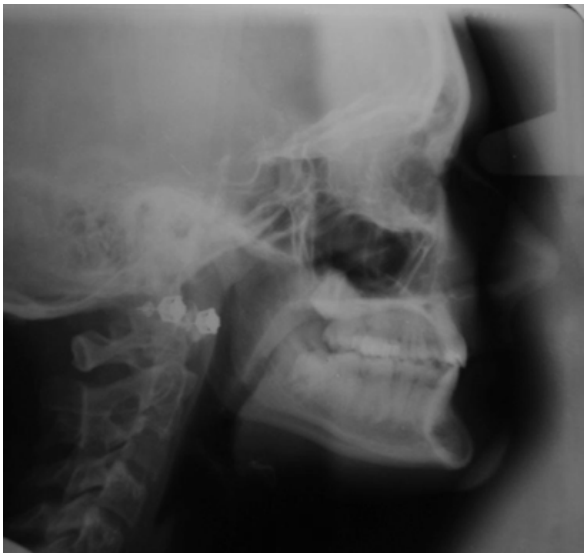
Posttreatment Facial Photographs



Posttreatment Casts

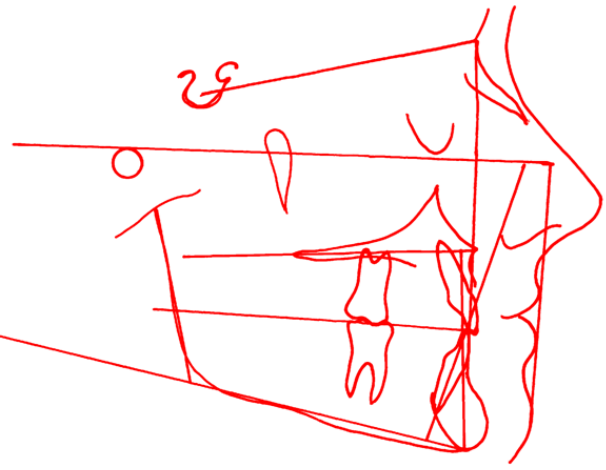


Posttreatment Panoramic Radiograph

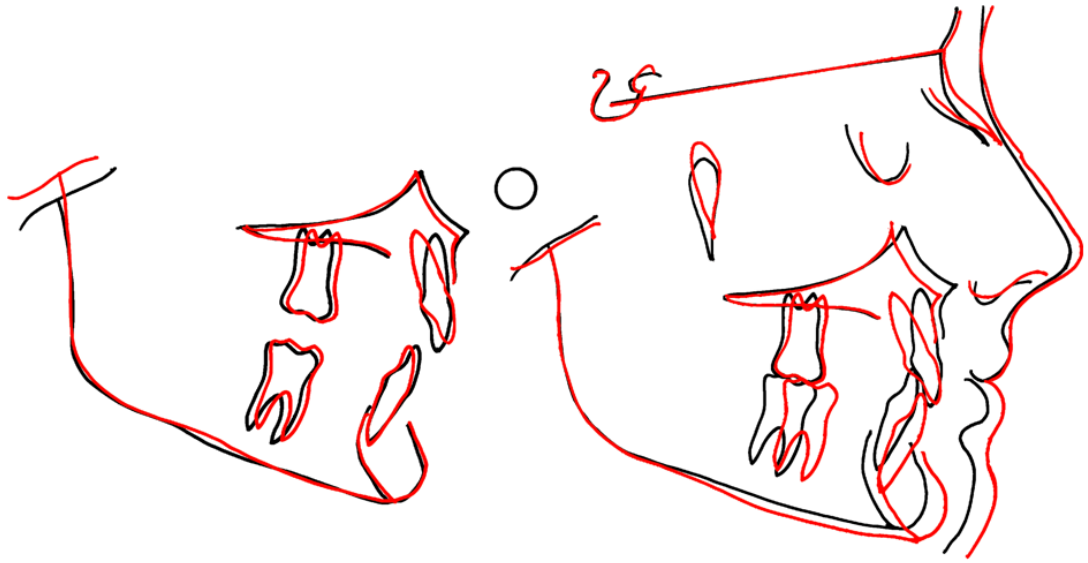


Posttreatment Cephalogram

FMIA	73
FMA	12
IMPA	95
SNA	79
SNB	79
ANB	0
AO BO	-1
OCC	2
Z	88
UL	17mm
TC	17mm
PFH	48mm
AFH	55mm
INDEX	.87



Posttreatment Cephalogram Tracing



Pretreatment/Posttreatment Superimpositions