Mandibular Asymmetry - A Clinical Case
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INTRODUCTION
This clinical report describes the orthodontic treatment of a patient presenting with a unilateral dental cross-bite and a deviated mandibular midline due to mandibular asymmetry.

A 14-year-old pre-menstrual Caucasian female was seen in the pediatric-orthodontic clinic at the University of Michigan, Ann Arbor, for orthodontic treatment. Her chief complaints were: unilateral cross-bite of the upper and lower left canines and a deviated mandibular midline. A complete set of orthodontic records was taken at the first visit. During the oral examination, it was noted that there was no CR-CO shift and the patient had a true unilateral cross bite. The patient felt within the parameters of a straightforward orthodontic case for a pediatric dentist. During the course of the treatment, the patient started menstruating and developing secondary pubertal sexual maturation. Commensurate with these changes, she experienced her pubertal growth spurt. Mandibular growth was expressed more on the right condyle and as a consequence, worsened the mandibular midline deviation and occlusal discrepancies.

This case report summarizes the diagnosis, treatment and future considerations in her orthodontic treatment.

CLINICAL CASE
Name: C.S. Sex: Female DOB: 7 August 1986

ORTHODONTIC DIAGNOSIS
Dental - Class I Canine RS and LS
- Class I tendency to Class III molar RCL and LCL
Skeletal - Class III

PROBLEM LIST
- Class III tendency
- Cross-bite on #23 and #33 (True unilateral cross-bite)
- Upper and lower crowding
- Deep Bite
- Deviated mandibular midline (to the left by 3mm)
- Asymmetric mandible

CLINICAL PHOTOGRAPHS AND X-RAYS

CLINICAL PHOTOGRAPHS AND X-RAYS

TREATMENT
- Upper and lower teeth crowding resolved
- Cross-bite corrected
- Deep bite improved
- Functionally stable occlusion achieved

FUTURE CONSIDERATIONS
- Surgery to correct asymmetrical mandible when the patient stops growing
- Achieve coincidental upper and lower midline esthetics
- Obtain ideal Class I molar relationship on left side

DISCUSSION
- It is important to take records periodically to evaluate progress of treatment and to detect possible atypical growth patterns.
- The aims of the treatment of mandibular asymmetry cases are to:
  - Obtain functionally stable occlusion
  - Monitor jaw growth and refer for surgery when patient is ready