

Early Orthopaedic Correction of Skeletal Class III with expansion and Delaire facemask: A Non-extraction approach.

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Orthodontists are often faced with the clinical challenge of managing unfavorable growth patterns of true skeletal Class III malocclusions and its unpredictable nature. This case report discusses the perfect marriage of maxillary expansion and protraction therapy in the early correction of a Skeletal Class III malocclusion after the patient's pubertal growth spurt. Whilst we are limited by our capacity to influence the genetic realms of mandibular growth, clinicians can modify maxillary sutural attachments to address retrognathic maxillae, a common aetiological contributor of Skeletal Class III malocclusions. This has led us towards a paradigm shift in treatment approach targeting early maxillary protraction.

The patient was a 13 years 7 months female, post-menarche. Her chief complaint was an unpleasant smile due to the inheritance of a progressively worsening underbite. On further investigation, she was diagnosed with a Skeletal Type III malocclusion characterized by a retrognathic maxilla and a prognathic mandible. A 2-phase treatment plan was conducted. Phase I treatment was limited to the upper arch with a bonded hyrax and a reverse pull facemask. This was followed by 2x4 mechanics with Damon braces to develop the upper archform and increase the leeway space for the permanent dentition. Phase II involved low torque upper and high torque lower Damon appliances with Class III elastics to optimise aesthetics, alignment and occlusion. Had we not achieve a positive overbite and overjet at an early age, the fate may have been orthognathic surgery of the lower jaw, extraction teeth and dental camouflage; none of which is the ideal treatment.