

The significance of the early causal diagnostics of developing malocclusion in children

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Introduction

Early malocclusion diagnostics represents an essential key to preventing such complications in children as impaired phonetics, esthetics, chewing, breathing, self-esteem. Despite the adoption of advanced technologies like CBCT or cephalometry, there is still a need for thorough medical history as a primer diagnostic tool.

Case report

The study presents an interesting case of a 5-year-old child born with congenital muscular dystrophy. The child had a motor deficit, absence of gait, muscle hypotonia, feeding difficulty, breathing difficulties, sleep apnea, severe maxillary hypoplasia or maxillary deficiency, concave profile, and pseudomacroglossia. The parents reported normal jaws development till the age of 15 months. The accurate anamnesis revealed the nocturnal usage of a ventilation device from the same age, that was used due to the ventilation difficulties.

The treatment plan included the placement of a rapid maxillary expansion appliance to widen the maxilla, followed by the simultaneous use of a facial mask for maxillary traction. The replacement of the device was arranged at the very beginning.

Follow-up

The four-years follow-up demonstrated almost the complete recovery, maxillary physiological growth, and development in accordance with the child's age. The success was achieved due to the coherent multidisciplinary work of different medical specialists.

Conclusion

This case demonstrates the importance of detailed parents quiz, early orthodontic diagnostics, and intervention to devise the proper treatment plan. Whenever possible, use only nose tubes, or helmet-like devices, to avoid jaw pressure in small children. Yet, improved outcomes with clinical medical history are still most evident than all other diagnostic tools.