

# BINDER'S SYNDROME AND CLASS III MALOCCLUSION: ARE PATIENTS SENTENCED TO SURGERY?

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Patients with maxillonasal dysplasia (Binder's syndrome) (BS) show hypoplastic midface, flat nose, typically crescent nostrils and deep fold between the upper lip and the nose with acute nasolabial angle. Class III malocclusion is common due to hypoplastic maxilla.

In longitudinal cephalometric studies comparing orthodontically treated BS cases with untreated controls, authors could not achieve successful orthopaedic effect on craniofacial growth (*Olow-Nordenram and Thilander\**), suggesting the need for a combination of orthodontic treatment and orthognathic surgery in severe cases.

## Aim of the investigation – Subjects and method

To evaluate in two 7-year-old severe cases of growing BS the possibility of orthopaedic effect on the maxilla by using a facial mask combined with a specific acrylic splint and a palatal expander (*Figure 1*).

Figure 1. Specific acrylic splint used for orthopaedic treatment

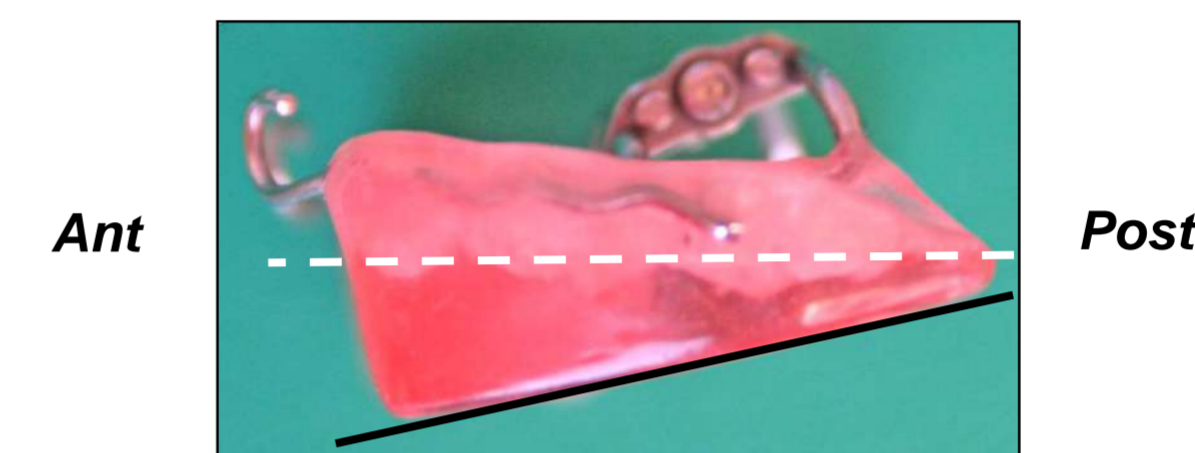


Figure 2. 7-year-old boy : before and after orthopaedic treatment

## Results and Conclusion

In both patients (*Figures 2 and 3*), the orthopaedic treatment lasted five months before overcorrection was obtained. Positive overjet and overbite characterized the relationship of the dental arches at the end of the active orthopaedic treatment.

SNA angle increased respectively 7° and 5° in each patients.

Three years post-orthopaedic treatment, no instability of the correction could be observed.

This case report objectifies that in some unfavourable cases of BS, early orthopaedic treatment can be successful and thus avoid the recourse to surgical resources.



Figure 3. 7-year-old girl : before and after orthopaedic treatment

\* *Olow-Nordenram M, Thilander B.* The craniofacial morphology in individuals with maxillonasal dysplasia (Binder's syndrome). A longitudinal cephalometric study of orthodontically untreated children. *Eur J Orthod* 1987; 9: 224-236.