

# Solitary median maxillary central incisor (SMMCI) syndrome and dental management: A case report.

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## Background

Solitary median maxillary central incisor (**SMMCI**) is a rare and complex developmental disorder with a wide phenotypic spectrum. This can range from a dental anomaly or be associated with growth deficiency and systemic abnormalities. It is usually associated with multiple midline defects such as holoprosencephaly. Early diagnosis of **SMMCI** is important and systematic monitoring of growth and development is crucial.

The condition is characterized by the presence of only one central incisor in both the primary and permanent dentition, it develops exactly along the midline axis.

The prevalence of **SMMCI** is estimated to occur in 1 in 50.000 births.

## Before treatment

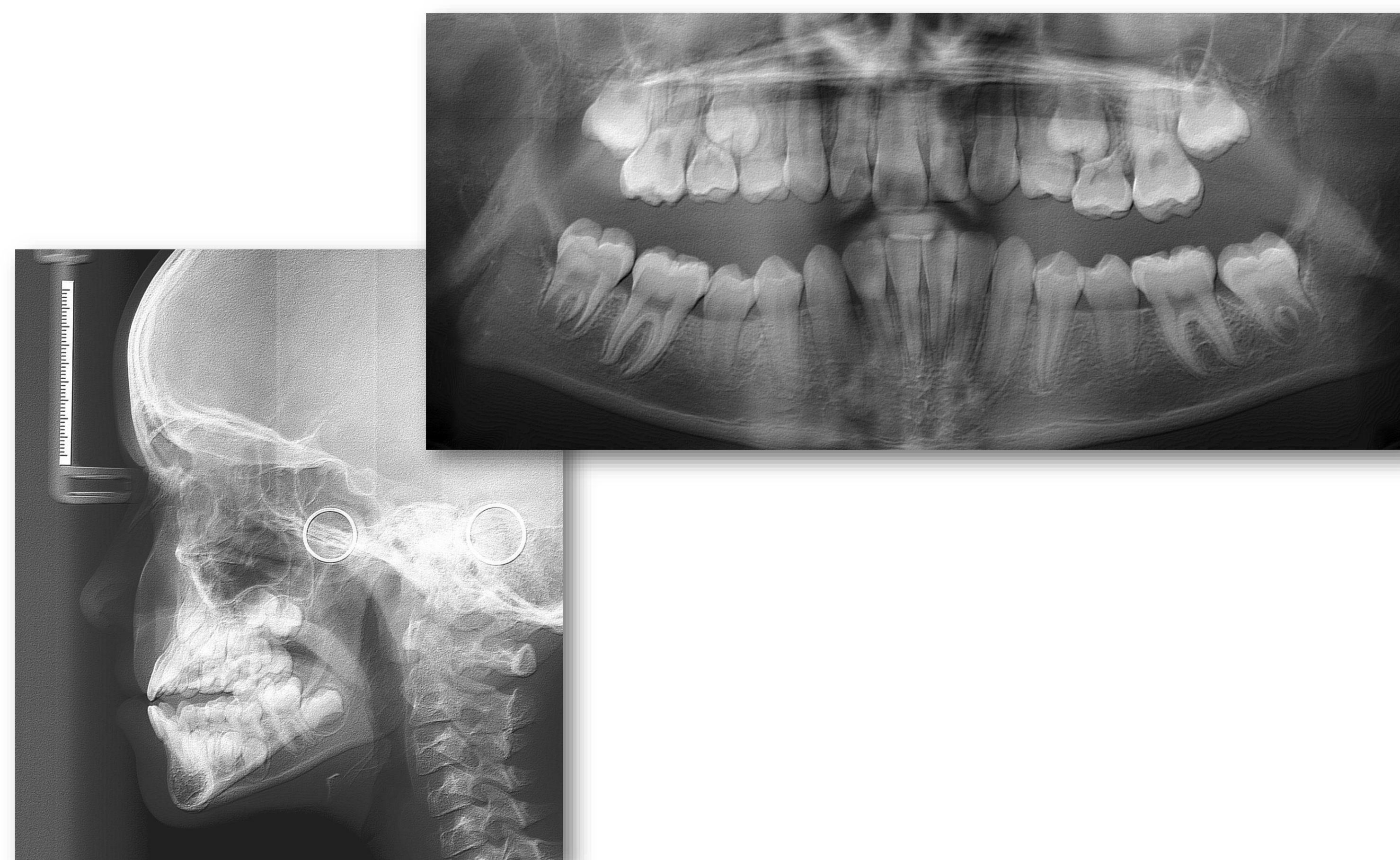


## Results

At the age of 12 years, multidisciplinary dental treatment was initiated. It commenced with an orthodontic widening of the maxilla (RME) and a facemask (anterior traction), in order to protract the maxillary complex during the skeletal expansion. When sufficient expansion of the maxilla, and a positive effect on the incisors was achieved, a treatment period with fixed appliances in both jaws was started. The **SMMCI**-tooth was moved to the right of the midline and reshaped.

After a total orthodontic treatment time of 1 year and 9 months, a fixed semi-permanent replacement for the left permanent maxillary central incisor was fitted.

## Before treatment



## Methods

We present a female with **SMMCI**, referred to the TAKO-centre from the Cleft-lip-palate-team (CLP) at Oslo University Hospital. The patient was referred to monitor dental and craniofacial growth and development, and to prescribe necessary multidisciplinary dental treatment at the optimal time and age.

The girl was also born with an incomplete cleft lip, but no other medical or cognitive symptoms. The **SMMCI** was diagnosed as an isolated finding.

The family was concerned about the facial and dental asymmetry and the increasingly developing class III tendency (mandibular prognathism).

## After treatment

