

# Treatment of posterior scissor bite with fixed appliance : a case report



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## Introduction

Scissor bite in the posterior teeth occurs when the upper teeth are positioned totally or unilaterally buccal to the lower teeth in centric occlusion. Uncorrected scissor bite may lead to functional problems such as deviation of the mandible, occlusal trauma, or improper occlusal force.

Several approaches have been suggested for correction of a scissor bite with using a cross elastics or a modified transpalatal arch.

In this case, we have successfully used a modified Nance appliance in maxilla and a modified lower lingual arch in mandible for correction of scissor bite. And it can be used efficiently without need of patient cooperation.

## Case report

**Pt . :** 8Y/M      **C/C :** Disharmony of the jaws and inability to establish centric occlusion

- Problem list :**
1. Left maxillary and mandibular permanent first molars were in scissors bite.
  2. The mandibular dental midline deviated to the right of maxillary midline.
  3. There was severe rotation of left central maxillary incisor due to two supernumerary teeth.
  4. The mandibular right permanent canine was in crossbite position.
  5. The maxilla was deficient in transverse dimension.

**Progress note**

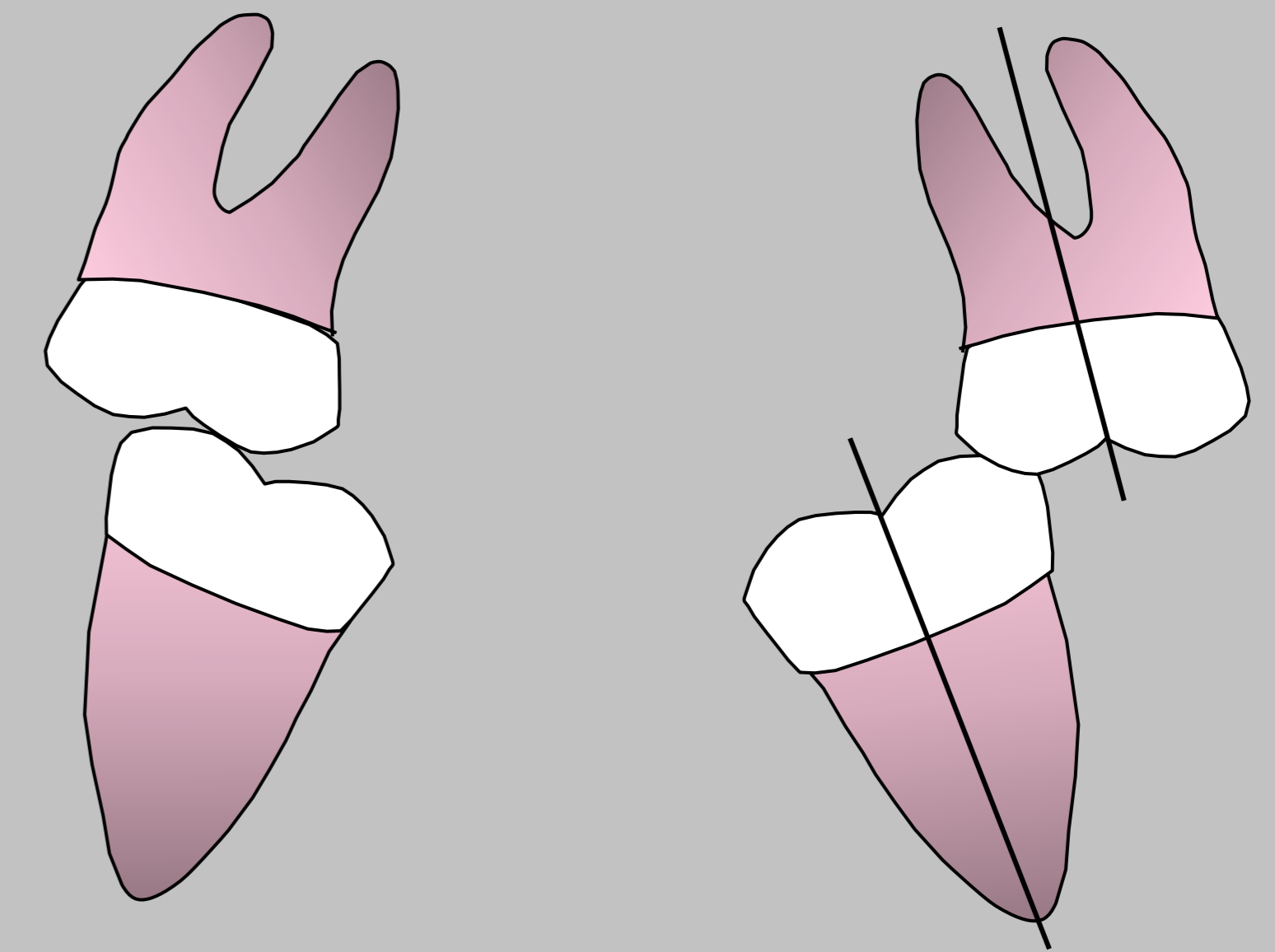
Initial : Intermaxillary cross-elastic treatment was attempted.

After 4 weeks : We replaced intermaxillary cross-elastic treatment with modified Nance appliance in maxilla and modified lower lingual arch in mandible.

After 5 weeks : There had been some movement to the palatal surface of the maxillary first molar.

After 8 weeks : There had been some movement to the buccal surface of the mandibular first molar and the maxillary first molar was in normal position.

After 13 weeks : Affected maxillary and mandibular left first molars were in normal position and that the posterior scissor bite had disappeared.



Initial



After 4 weeks



After 8 weeks



After 13 weeks



## Summary

A cross elastic method is simple but it often causes extrusion of the anchor teeth, and requires patient cooperation. Thus fixed appliance was chosen as it provides advantages such as reducing need for patient cooperation, better control of tooth movements. And a modified Nance appliance in maxilla and a modified lower lingual arch in mandible were successfully used for correction of scissor bite.

We will expand the maxillary arch and correct severe rotation of the anterior tooth for proper interdigation and aesthetic improvement.