

## **Crossbite Unilateral Correction Using Transpalatal Arch with Extension Arm Modification**

**Authors :** Hanifa Maryani Ahmad, Muslim Yusuf

**Abstract :** Background: Unilateral crossbite can be defined as an abnormal transverse relationship between the upper and lower teeth where the mandibular buccal cusp occluding to the maxillary buccal cusp and which involves only one side of the arch. This report describes the treatment of an adolescent female with Class III malocclusion unilateral crossbite resulting from a mildly constricted maxillary arch. The patient had a Class III skeletal relationship, Class III molar relationships, unilateral crossbite on the left side, and deviated midlines. Objectives: The treatment objectives were to correct the abnormal transverse relationship, achieve proper dental inclination, and correct the unilateral crossbites to improve the facial profile. Case management: The treatment protocol was using transpalatal arch with extension arm modification to expand the maxillary arch. Following the levelling and aligning stage of treatment, using a vertical loop while mandibular arch was expanded after getting an end to end relationship on the anterior side. Results: Corrections of the unilateral crossbite were achieved in 4 months. The treatment is still on process because the canines relationship were not corrected. Conclusions: This report highlights a treatment using transpalatal arch with extension arm modification that can be used to expand the transverse width of an arch to correct the discrepancy. Even though the treatment processes were still ongoing, the correction of the unilateral crossbite have been achieved in 4 months by only using the transpalatal arch.

**Keywords :** crossbite unilateral, late growing, non-extraction, transpalatal arch

**Conference Title :** ICDOI 2018 : International Conference on Dentistry and Orthodontic Implants

**Conference Location :** Singapore, Singapore

**Conference Dates :** May 03-04, 2018