

Orthodontic Catastrophe: A Rare Vision

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A 33 year old female patient undergoing orthodontic treatment in Gitam Dental College and Hospital, Visakhapatnam, India, reported with chief complaint of pain in the palatal area since 10 days. The patient had a feeling of discomfort since two weeks and eventually started having pain 10 days back. On examination, the Transpalatal Arch (TPA) had displaced and was stuck in the palatal tissues. There was a swelling and the TPA was covered with the palatal overgrowth [Table/Fig-1] in over a span of four weeks. TPA arm got detached over the soldered area attached to the left molar band while eating food, which was due to weak spots in the soldered area. The patient had no relevant medical history with absence of systemic symptoms.

CASE MANAGEMENT AND FOLLOW-UP

The swelling was diagnosed as a foreign body reaction. Palatal outgrowth was evident. The TPA was removed by cutting with a heavy wire cutter. Antibiotics (Augmentin 625 mg; twice a day for three days) was prescribed to check for the soft tissue infection. Analgesic (Zerodol SP; twice a day for three days) was prescribed to alleviate pain. Topical mouthwash was prescribed for hygiene maintenance. She was asked to locally apply Dologel CT two/three times a day. Active treatment was discontinued for two months till healing occurred. Post orthodontic treatment results showed no visible pathology as evident in [Table/Fig-2].



[Table/Fig-1]: Dislodged Trans Palatal Arch (TPA). **[Table/Fig-2]:** Healed palate.

TPA is a cemented appliance that helps to stabilize, provide anchorage from first molars especially in treatment of Class II

Division I Malocclusion, extraction cases. This is one of the rarest instances where a TPA has accidentally dislodged and caused palatal growth leading to patient's discomfort and disgust.

There are various reasons for dislodged TPA [1]. The most common modes of failure being cement loss, solder failure, soft tissue lesion and breakage [2]. In the present case, the patient presented with a palatal growth due to breakage of the TPA. The TPA acted as a foreign object in the mouth leading to local tissue injury and inflammatory changes [3,4]. It is now a reactive localized overgrowth that led to patient inability in chewing food, speech disturbances and uneasiness. Precautions need to be taken while wearing a TPA. Sticky/chewing foods need to be avoided. Pulling/flicking with tongue can put stress on the metal and cause it to break. Management includes removal of the etiology, re-cementation of the TPA into its proper position. If not interrupted at the right time, then surgical intervention would have been indicated.

It is concluded that TPA use must be controlled and carefully monitored to avoid any untoward incidents. Any report of such incident must be immediately catered to and managed. Immediate discontinuation of the appliance is warranted. In this particular case, discontinuation led to healing of the insulted area. Cases may arise when surgery would be required to accelerate the healing process. Therefore, at every visit during orthodontic treatment, TPA must be checked for any accidental loss/ breakage.

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FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Nov 25, 2015**

Date of Peer Review: **Jan 24, 2016**

Date of Acceptance: **Mar 22, 2016**

Date of Publishing: **May 01, 2016**