Management of Class II div I malocclusion- A Case Report

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Fig2. Pre & Post treatment intra oral photographs

Introduction

Class II div I malocclusion is most prevalent type of malocclusion encountered in India. Its management frequently involves use of myofunctional appliance in growing patient [1, 2, 3] & camouflage treatment[4] with extraction either 2 or 4 premolars. If it is sever in adults surgical treatment [5] is recommended. Patient generally has convex profile & incompetent lips. This case report illustrates a adolescent female patient having angles Class II div I malocclusion treated with extraction of all the first premolars.

Pre Treatment Assessment

- Patient complained of forwardly placed teeth & incompetency of the lips.
- No relevant medical and dental history.
- EXTRA ORAL examination revealed convex profile, & incompetent lips and ower lip trap.(fig 1)
- INTRA ORAL examinationrevealed Class II molar & end on canine relationship, good oral hygiene, healthy soft tissuecontracted maxillary & mandibular arches and increased over jet& overbite (fig 2)
- OPG examination revealed erupting maxillary and mandibular third molars. (fig 3)
- CEPHALOMETRIC examination revealed normal class I skeletal base with maxillary incisor proclination and. hypo-divergent growth pattern.

Fig1. Pre & Post treatment extra oral photographs

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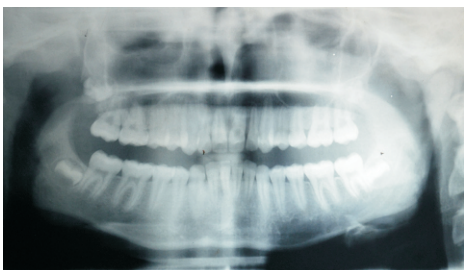

Fig 3.Pre-treatment OPG

Fig 4.Pre-treatmentcephalometricX ray

Diagnosis
- Class I Skeletal base
- Hypodivergent jaw bases
- End on molar relation bilaterally
- End on canine relation bilaterally
- Proclined upper anteriors
- Mild crowding in mandibular arch
- Convex profile

Treatment Objectives
- Leveling and aligning of both arches
- Achieve class II Molar relation
- Achieve class I canine relation
- Achieve an esthetic soft tissue profile.

Treatment plan
- Extraction was done of maxillary first premolars.
- Appliance of choice was Pre-adjusted edgewise appliance MBT prescription 0.022 slot
- Moderate Anchorage preparation was done in maxillary arch(Banding of 16, 26,) and maximum anchorage in mandibular arch (Banding of 36, 37, 46, 47)
- Bonding was done in upper and lower arch with placement of 0.014 NiTialong with bendbacks and lacebacks.
- Leveling and aligning achieved on a continuous arch mechanics with 0.017*25 NiTi.
- Space closure on 0.019 * 0.025 SS (sliding mechanics) with active tiebacks.
- Achieved normal overbite and overjet.
- AchievedAngle's Class II molar and Class I canine relation
- Achieved an esthetic soft tissue profile.
- Retention: Upper and Lower Lingual bonded retainer were given to the patient.

Post Treatment Assessment
- Class I molar & canine relation
- Straight Profile
- Normal overjet& overbite
- Duration of the treatment was 18 months.

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