

ADOLESCENT TREATMENT

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CHAPTER 18
Pages 491-509

SCIENTIFIC & CLINICAL REASONS

CLASS II MALOCCLUSION
-mandibular growth spurt

PALATAL EXPANSION
-sutural expansion

CLASS III MALOCCLUSION
-maxillary protraction

SPACE CONSIDERATIONS
-crowding/bimaxillary protrusion
LATE TRANSITIONAL DENTITION
-E space (Leeway space)

ADOLESCENT TREATMENT

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OCCLUSION
Dynamic, three dimensional biological entity.

MALOCCLUSION

- Sagittal
 - Skeletal
 - Dental
- Vertical
 - Skeletal
 - Dental
- Transverse
 - Skeletal
 - Dental

ORTHODONTIC TREATMENT DURING ADOLESCENCE


WHY NOW ?

ADOLESCENCE
PERMANENT DENTITION
APPEARANCE
SCIENTIFIC & CLINICAL REASONS
COMPREHENSIVE TREATMENT

CLASS II DIVISION 1

- Distocclusion of molars
- Class II canine relationship
- Proclined maxillary incisors
- Crowding and/or Spacing
- Moderate/severe overjet
- Overbite
 - normal
 - deep
 - open
- Crossbite
 - anterior
 - posterior

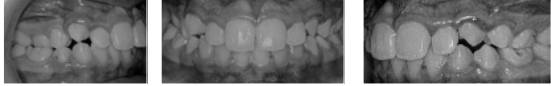
CLASS II DIVISION 1 MALOCCLUSION



PERMANENT DENTITION

- Distocclusion of molars
- Distocclusion of canines
- Moderate overjet
- Deep overbite
- Malalignment of incisors

CLASS II DIVISION 1 MALOCCLUSION
LATE MIXED DENTITION




TREATMENT

TRANSVERSE : Expand maxillary arch/modify growth

- correct mandibular lateral shift
- correct midline deviation
- correct crossbite
- correct sagittal molar and canine asymmetry
- Align all teeth

CLASS II DIVISION 1 MALOCCLUSION



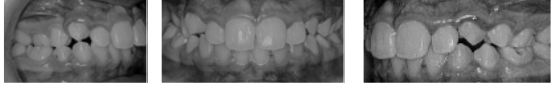
PERMANENT DENTITION

- Distocclusion of molars
- Distocclusion of canines
- Moderate overjet
- Deep overbite
- Malalignment of incisors

TREATMENT

- Distalization of molars
- Distalization of canines
- Extrusion of posterior teeth
- Intrusion of anterior teeth
- Alignment of all teeth
- Growth modification

CLASS II DIVISION 1 MALOCCLUSION
LATE MIXED DENTITION

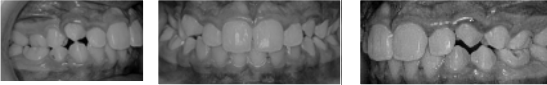


TREATMENT

SAGITTAL: Distalize maxillary molars/relative distalization

- Distalize maxillary canines
- Retract incisors
- Use E-space
- Modify growth

CLASS II DIVISION 1 MALOCCLUSION
LATE MIXED DENTITION



RIGHT

- Distocclusion of molars
- Distocclusion of canines

SAGITTAL

LEFT

- Cusp to cusp molar relationship
- Class I canine relationship

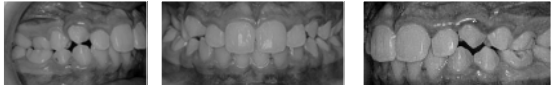
TRANSVERSE

- Posterior Crossbite (right)
- Mandibular lateral shift
- Functional mandibular midline deviation (right)

VERTICAL

- Moderate overbite (60%)

CLASS II DIVISION 1 MALOCCLUSION
LATE MIXED DENTITION

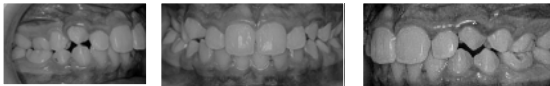


TREATMENT


VERTICAL : Level dental arches

- Extrude posterior teeth
- Intrude anterior teeth/relative intrusion
- Modify growth

Pre-treatment

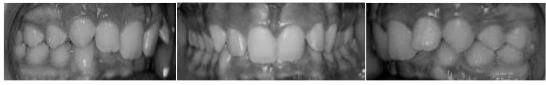


CLASS II DIVISION 1 MALOCCLUSION
LATE MIXED DENTITION



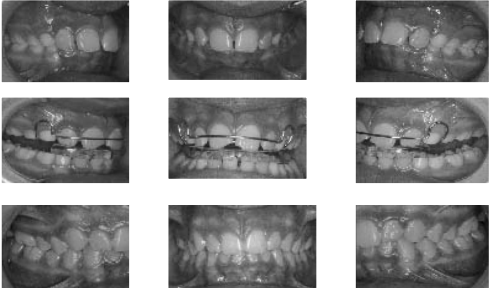
Post-treatment

CLASS II DIVISION 2 MALOCCLUSION
Sub-division right

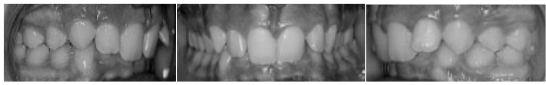


- Retroclined maxillary central incisors
- Flared maxillary left lateral incisor
- Deep, impinging overbite (>100%)
 - extruded maxillary central incisors
 - marked curve of Spee
- Cusp to cusp right molar relationship
- Cusp to cusp right canine relationship
- Neutroclusion of left molars
- Class I left canine relationship

CLASS II DIVISION 1 MALOCCLUSION
Treatment with Functional Appliance



CLASS II DIVISION 2 MALOCCLUSION



TREATMENT

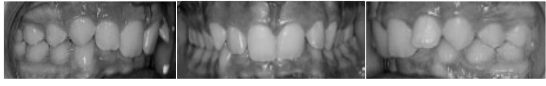
- Flare maxillary central incisors
- Intrude maxillary central incisors
- Intrude mandibular incisors
- Extrude maxillary molars
- Extrude mandibular molars
- Distalize maxillary right molar/ relative distalization
- Distalize maxillary right canine
- Align all teeth
- Modify dentofacial growth
 - vertical
 - sagittal

DO NOT EXTRACT


CLASS II DIVISION 2 MALOCCLUSION

- Retroclined maxillary central incisors/lateral incisors
- Flared maxillary lateral incisors/canines
- Deep overbite (=> 100%)
- Hypodivergent skeletal pattern
- Normal sagittal interjaw relationship
- Well developed chin
- Short lower anterior face height

CLASS II DIVISION 2 MALOCCLUSION



Pre treatment



Post treatment

CLASS III MALOCCLUSION

Pseudo Class III:

Class I

with mandibular anterior shift due to premature occlusal contacts




TRUE CLASS III

- Mesioclusion of molars
- Class III canine relationship
- Anterior crossbite
- Possible posterior crossbite
- Crowding and /or spacing
- Overbite - normal
 - deep
 - open

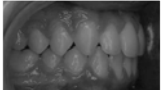


ANB = < 0°

CLASS III MALOCCLUSION

Non- extraction








Pre-treatment

Post-treatment




CLASS III MALOCCLUSION

- Mesioclusion of molars
- Class III canine relationships
- Posterior crossbites
- Edge to edge anterior relationship
- Posterior openbites
- Crowding /malalignment


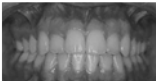

CLASS III MALOCCLUSION

Non-extraction

Pre-treatment




TREATMENT: - Rapid maxillary palatal expansion (Hyrax appliance)
- Fixed appliances / Intermaxillary mechanics (Class III elastics)

Post-treatment

CLASS III MALOCCLUSION

Non- extraction Treatment

TRANSVERSE

Palatal Expansion

SAGITTAL




Protraction of maxillary arch

VERTICAL

Extrusion of all teeth


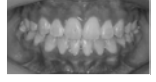

CLASS III MALOCCLUSION

Extraction

Pre-treatment

TREATMENT : - Hyrax appliance
- Extraction of four first premolars
- Fixed orthodontic appliances / Class III elastics

Post-treatment

