

# **Adjunctive Treatment for Adults**

**Dr. Ali Habib Akber**  
**Division of Orthodontics**  
**KAAU**

**Saudi Specialty Certificate-Restorative**

# Malpractice ?





# What are the objectives of general dentist's Treatment ?

- Eliminate pathology
- Restore missing teeth
- Cusp to fossa or cusp to cusp occlusion

# What are the objectives of the Orthodontist's Treatment ?

- Three dimensionally Class I occlusion
- Good Facial Esthetics
- Health
- Stability

**We should unite our goals**



## **In order to treat a problem, you should:**

- a. Conduct proper diagnosis
- b. Know what you can do
- c. Formulate a comprehensive treatment plan
- c. Master simple orthodontic mechanics

## **a. How to conduct proper diagnosis ?**

- a. Chief complaint, History and Clinical examination
- b. Analysis of proper records  
(Pictures/Radiographs/ Mounted orthodontic models/ Diagnostic wax up)
- c. Obtain a prioritized problem list

**b. To know what you can do:**

a. Orthodontic triage (Differentiate between simple and difficult problems)

**c. Formulate a comprehensive treatment plan:**

a. Does the patient needs orthodontic treatment

b. When during my comprehensive treatment should I do the orthodontic treatment?

c. Who will do the treatment; me or the orthodontist?



#### **d. Master simple orthodontic mechanics:**

- a. I should know how to design simple removable appliance and how to activate it
- b. I should know how to do banding and bonding especially for partial fixed orthodontic appliance
- c. I should know how to retain my results

## **1. Adjunctive Orthodontic Treatment**

- a. When is it necessary?
- b. Goals
- c. Limited vs. Comprehensive Orthodontics

## **2. Comprehensive Orthodontic Treatment**

- a. When is it necessary?
- b. Goals
- c. Limited vs. Comprehensive Orthodontics

# Adjunctive Orthodontics

Tooth movement carried out to  
facilitate other dental  
procedures necessary to  
control disease, restore  
function and/or enhance  
appearance (Profitt, 2007)

# Objectives of adjunctive treatment

- Facilitate restorative treatment
  - More ideal and conservative techniques
  - Optimal esthetics can be obtained with bonding or laminates or crowns
- Improve periodontal health
  - Eliminate plaque harboring areas
  - Improves alveolar ridge contour adjacent to teeth
- Establish favorable crown-to-root ratio and position of the teeth and allow forces to be transmitted along the long axes of teeth
- It has little to do with Angle's concept of ideal occlusion



# Adjunctive Vs Comprehensive treatment

General  
dentist

Partial  
Fixed  
appliance

Less than  
6 months

The  
specialist

Complete  
Fixed  
appliance

More than  
6 months



# Clinical Examination

## Evaluate patient in 3 dimensions

- 1-Acceptable facial proportions
- 2-Lip line upon smiling !!!!!
- 3-Lip position relative to E-Line
- 4-Lip competence
- 5-Upper midline relative to the facial midline
- 6- Vertical dimension

# Radiographs required

- Panoramic radiograph
- Full mouth radiographs
- Cephalometric radiograph:
  - To evaluate incisors in two planes
  - To evaluate lip position

## ORTHODONTIC TRIAGE: ADULTS

Severe  
(comprehensive treatment)

Moderate  
(adjunctive treatment)



Triage  
process

Complete fixed appliance,  
may need jaw surgery

Skeletal or  
dentofacial problem

Provide adjunctive treatment  
alone if needed for perio-  
restorative treatment and if  
comprehensive treatment  
is not feasible

Orthodontic space closure

Missing molar

Tip distally before making  
bridge

Missing incisors

Reposition by opening  
pontic space

Extractions, space closure

Crowded incisors

Comprehensive treatment  
if other problems

Posterior crossbite,  
dental

Bite plate for vertical clearance  
plus springs or elastics to  
move teeth

Level lower arch with fixed  
appliance, then retract

Flared and spaced  
maxillary incisors,  
deep bite

Flared and spaced  
maxillary incisors,  
vertical clearance

Retract with removable or  
fixed appliance in upper, retain

## ***Adjunctive orthodontic procedures:***

- Uprighting of posterior teeth.
- Forced Eruption.
- Alignment of teeth
- Simple retraction of incisors
- Space redistribution
- Intrusion
- Opening space for a pontic/ Implant

# Prioritized Problem List

- Very important to consider Chief Complaint
- Prioritize problems according to their importance starting with the c.c.
- Obtain objectives for the problems
- Formulate comprehensive treatment plan



Comprehensive treatment plan



Stage 1: disease control



*Re-evaluate*

Stage 2: establish occlusion



*Stabilize*

Stage 3: definitive perio/restorative tx



Stage 4: maintenance

**Never move teeth in the  
presence of periodontal  
inflammation**

# **Master simple orthodontic mechanics:**

- a. I should know how to design simple removable appliance and how to activate it**
- b. I should know how to do banding and bonding especially for partial fixed orthodontic appliance**
- c. I should know how to retain my results**

# Removable vs. Fixed Appliances

## REMOVABLE

- Tipping only
- No control over root movement
- Pt's co-operation
- Hygienic

## FIXED

- Bodily translation
- Control of root movement
- Less dependent on pt's co-op
- Less hygienic





24-10-'01

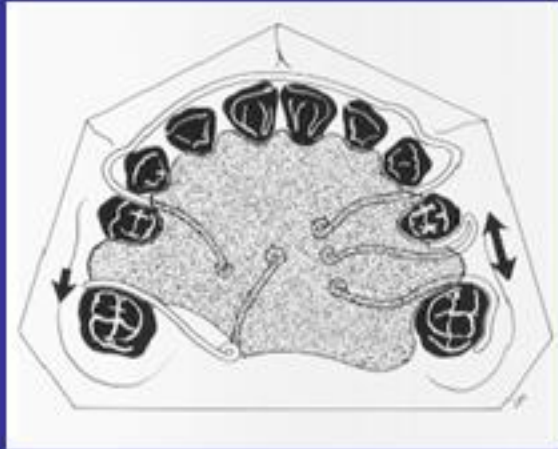


20-2-'02



# Springs

Posterior space regaining



**Spring winding**



**correct**



**incorrect**

# Spring Retainer



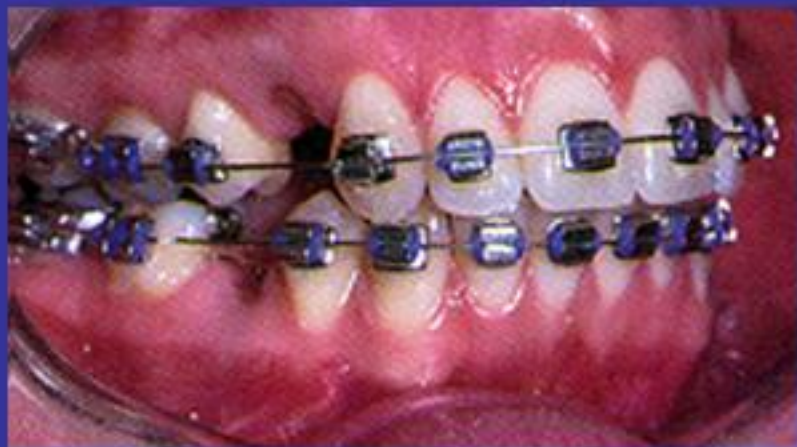
# Adjuncts to Treatment

Biteplate

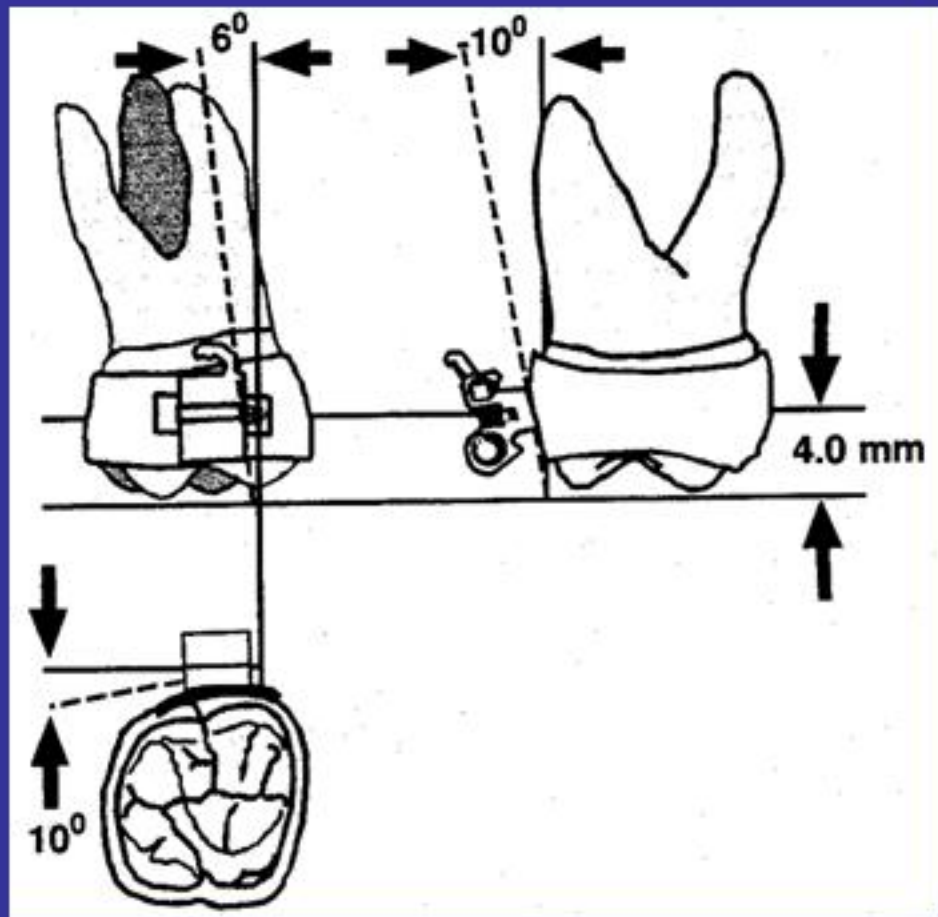


**Anterior Bite  
plane**

# BONDED APPLIANCES



# Banding



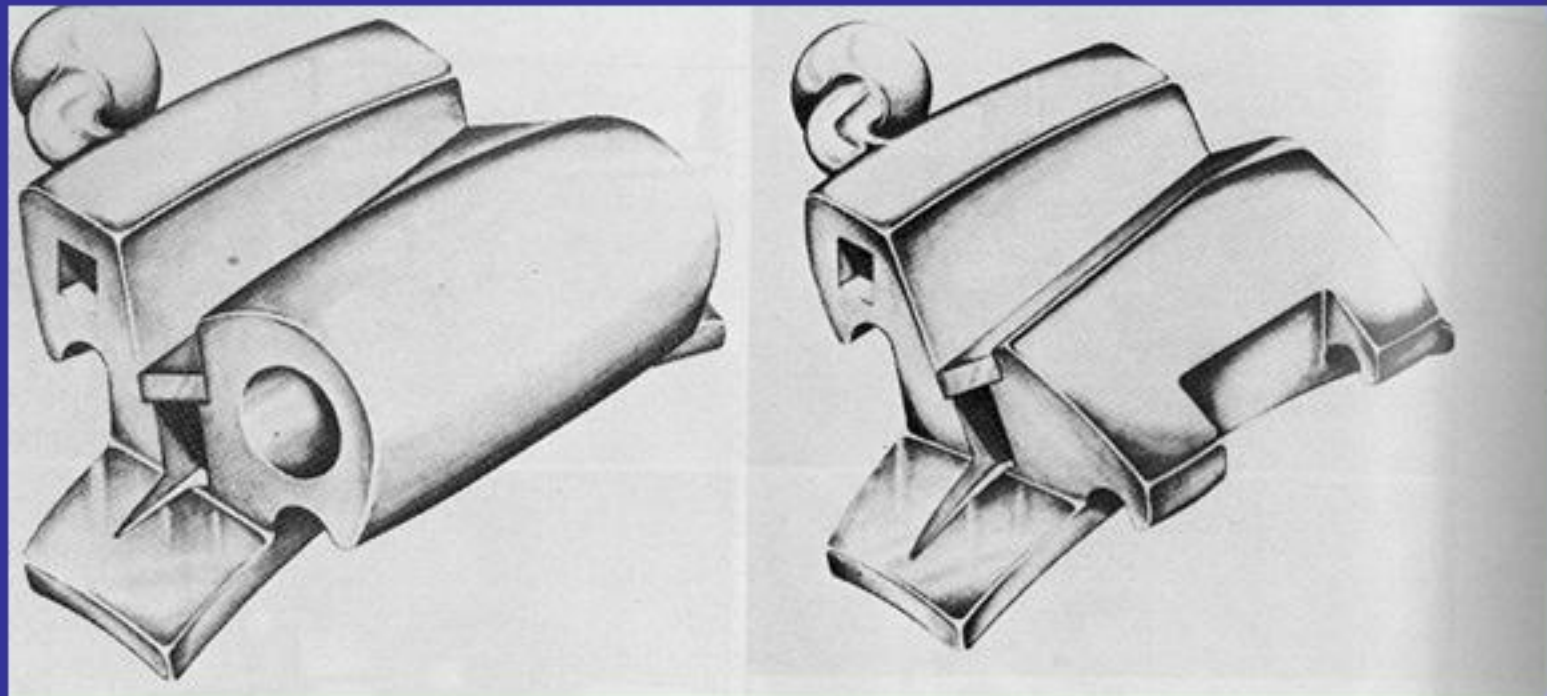


# Banding

- Size bands on the casts first; Exact mesodistal dimensions/
- Buccolingually, size up to the maximum convexity of the buccolingual dimension.
- Fit band with the hook facing distogingival and the tube in the center of the buccal surface
- Use band seater
- Prophylaxis
- Cement bands ( Be carefull not to block the tubes)

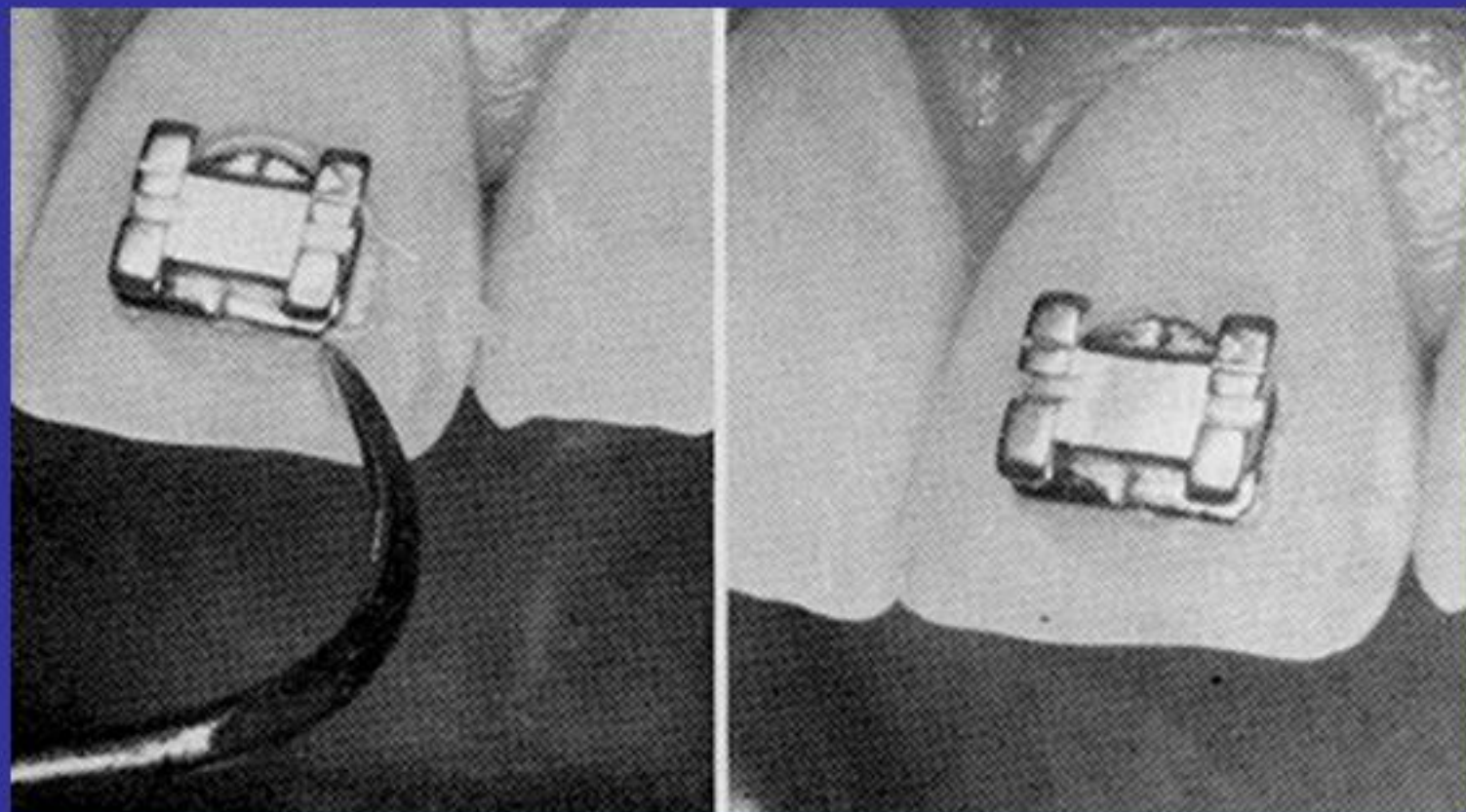
# Posterior attachments

- MOLAR TUBES



# Anterior Attachments

- Brackets











**Progress Records**

**13 - 3 - 2002**



**Progress Records**

**3 - 4 - 2002**



**Progress Records**

**3 - 4 - 2002**



**Progress Records**

**3 - 4 - 2002**





# Simple Fixed appliance



**PRE-TREATMENT**



**POST-TREATMENT**

# Coil Spring



Closed or open coil springs