Nahla eleiwi

Sheet 21 Extra-oral traction and anchorage:

Anchorage: Resistance to the unwanted tooth movement, it can be both intraorally and extra-orally (as headgear).

Types: 1. Headgear (class1 & 2)

 2. Face mask ( reverse pull headgear, protraction headgear) for class 3 mainly and maxillary retrusion and mesial movement of teeth, in 8-10 yrs aged people.

 3. Chin-cup (restricts mandible growth) not used anymore.

Headgear: Force level 200-250 g per side , wear time = 10-12 hours per day, it gives anchorage from the neck area or cranium, to achieve growth modification or teeth movement.

EXTRAORAL TRACTION: Active Distal movement of teeth to create space for alignment and OJ reduction, force level : 400-500 g per-side , wear time +/- 12-14 hours per day.

What is the difference between extraoral traction and anchorage? 1. Force level 2.Wear time.

CENTER OF RESISTANCE IN MAXILLA:

1. Between 1st and 2nd premolar anteroposterior.
2. Between the lower margin of orbitale & distal apex of the first molar vertically in sagittal plane.

How to do growth modification for maxilla using headgear (orthopedic) ?

1.force should pass through the center of resistance of maxilla.

2. it restrains the growth of maxilla vertically or downward.

3.Bigger force is needed 500 + g per-side for > 14 hours a day.

HEADGEAR components:

1. Part connected to teeth (facebow, J-hook not used anymore).

2. strap or headcap attached to neck.

3. elastic part or spring mechanism to pull teeth. (controls the magnitude of force).

Center of resistance CR: the point on which the application of single force will produce bodily movement (in molars: Tri-furcation).

