Nahla eleiwi

Sheet 20 provision of space

-Why is “space analysis” is so important ?

50% of Jordanians have crowding, so we need to provide space.

-How do we provide space ?

Extraction.

Non-extraction methods: a. Arch expansion

 b. Arch lengthening

 c. Uprighting teeth

 d. inter-proximal stripping

-2nd premolar gives 7 mm space per side

-A unit is 7 mm, half-unit equals half 2nd pm width =3.5 mm

Crowding >= 3.5 mm (Extraction case)

Crowding < 3.5 mm (non-extraction)

-Why do we provide space?

1. To relieve crowding.

2. To compensate for skeletal discrepancy (camouflage) –to correct molar and incisor relationship.

-What does “Camouflage” mean?

To correct occlusion and accept the skeletal pattern without correction.

-What are the possible ortho. Treatment options?

1. Accept 2.Camouflage 3.Growth modification. 4. Surgery

1. Arch expansion :

Indications: 1. unilateral crossbite with displacement.

 2. Bilateral crossbite with crowding.

 3. Distalize upper posterior teeth.

 4. Preparation for bone-graft in cleft

 2. Arch lengthening:

Anteroposterior

Anterior: procline incisors, Posterior : distalize posterior teeth.

\*\*\* This is only in upper arch (more stable).

\*\*\*each 1 mm of proclination gives 2 mm space.

How do we do this ? 1. URA :Screws , Z-spring , Palatal finger spring.

1. Fixed appliance.

\*\*\* distalization gives 2-3 mm , and we need to use headgear with URA or fixed appliance, because distalization will create a reactionary force which is procliation of incisors, and we need anchorage to resist this movement if it’s undesirable.

3. Uprighting Teeth :

-creates minimal space , done using fixed appliance.

 4.Inter-proximal stripping:

-we remove 0.25 mm from each side of the tooth, anteriors 0.3 mm per-contact, posteriors 0.5mm.