Anchorage in Orthodontics – Lecture

1. Definition of Anchorage:

Anchorage in orthodontics is the resistance to unwanted tooth movement during the application of orthodontic forces. It is a fundamental principle in orthodontic treatment planning and plays a major role in treatment success.

2. Importance of Anchorage:

Proper anchorage control helps achieve desired tooth movement, maintain space, preserve occlusion, and prevent unwanted side effects such as anchorage loss or tipping of anchor teeth.

3. Classification Based on Source:

Intraoral anchorage: Using teeth, transpalatal arches, lingual arches, and fixed appliances.

Extraoral anchorage: Such as headgear, which uses the head or neck as a source of resistance.

Skeletal anchorage: Using mini-implants or miniplates fixed to bone.

4. Classification Based on Degree:

Minimum anchorage

Moderate anchorage

Maximum or absolute anchorage

5. Factors Affecting Anchorage:

Number of anchor teeth, root surface area, bone quality, direction and magnitude of force, appliance design, and patient cooperation.

6. Absolute Anchorage:

Absolute anchorage prevents any movement of anchor units and is commonly achieved using skeletal anchorage systems, especially mini-implants.

7. Conclusion:

Anchorage control is essential for successful orthodontic treatment, and the appropriate type must be selected according to the clinical case and treatment objectives.