

Faculty of Dentistry

Operative Dentistry Department

Dental Anatomy 2

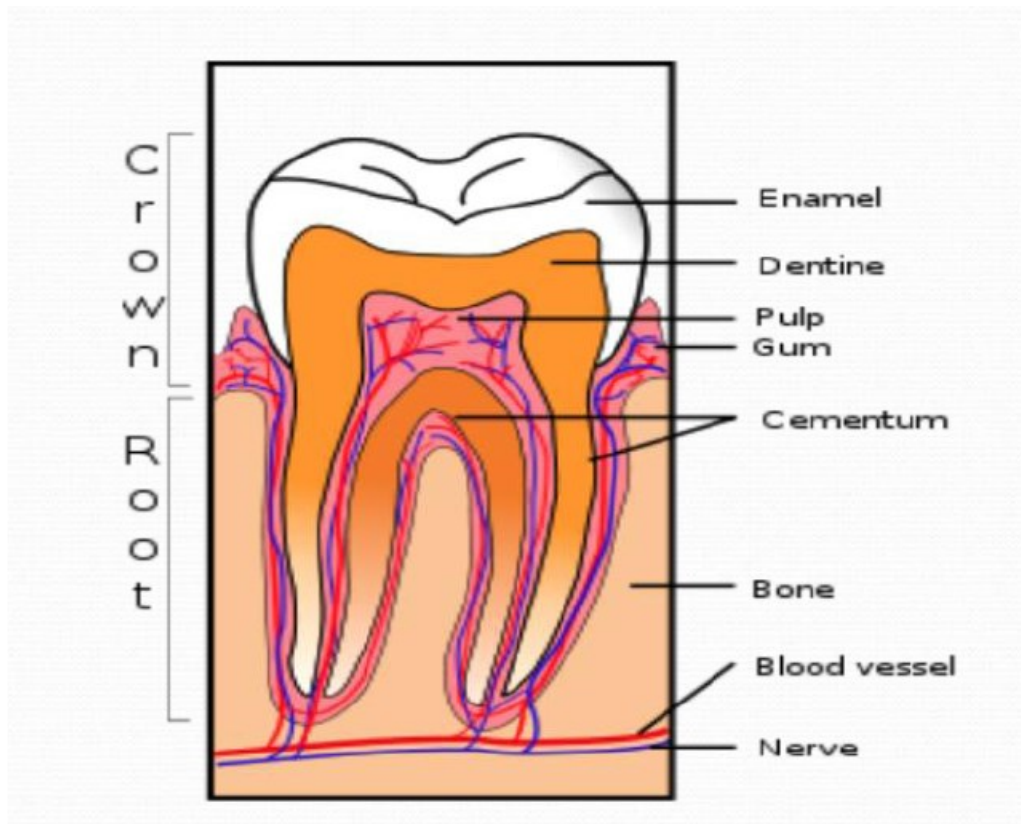
Lecture 1

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Tooth portions (crown & root)

The enamel, cementum and dentine are the three **hard** tissues of the tooth, and the dentine forms the major bulk of the tooth structure. While, the fourth tissue of the tooth is the pulp which is the **soft** tissue, within the dentin providing blood supply, innervation and connective tissue. The primary function of the pulp is to produce dentin.

The pulp consists of two parts, the pulp chamber and the pulp canal. The **pulp chamber** is that part of the dental pulp inside the crown, while the **pulp canal** is inside the root.



The number of roots

- **single root** as in all anterior teeth, mandibular premolars and maxillary second premolars.
- **two roots** with *bifurcation* which is the division of the root trunk into two branches as in mandibular molars and maxillary first premolars.

- **three roots** with *trifurcation* which is the division of the root trunk into three branches as in maxillary molars.
- **Root Trunk** is the base of the root of a multirooted tooth.
- **Terminal Roots** is the branching of the root from the root trunk.
- **Apex** is the terminal end or tip of the root.

Surfaces of the teeth



The crowns of incisors and canines have *4 surfaces* and a ridge and the crowns of premolars and molars have *5 surfaces*.

- **1. Labial surface:** is the surface which is towards the lip in incisors and canines (=in anterior teeth).
- **2. Buccal surface:** is the surface which is towards the cheek in premolars and molars (=in posterior teeth).
- The labial and buccal surfaces could be termed as the “ **Facial surfaces** “.
- 3. Lingual surface:** is the surface which is facing the tongue (all teeth).
- **4. Occlusal surface:** is the surface of posterior teeth coming in contact with the teeth in the opposite jaw during closing the mouth. In anterior teeth this surface is called “ **Incisal ridge**”.

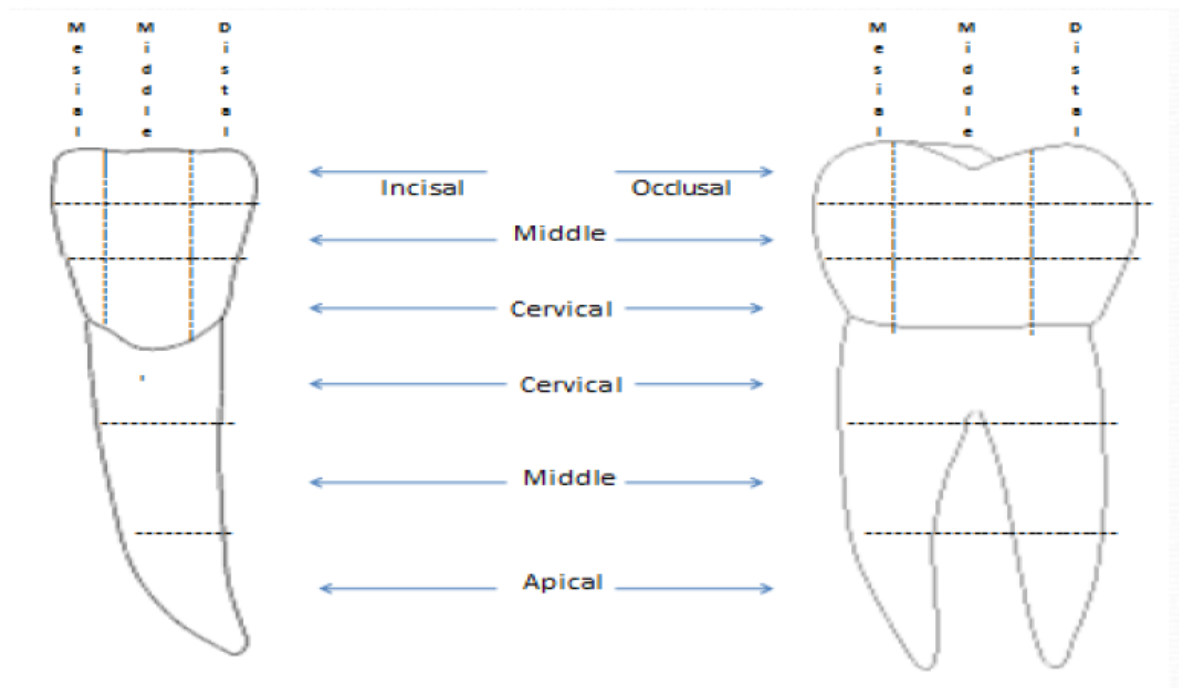
5.Proximal surface: is the surface of the tooth facing towards adjacent teeth in the same dental arch.

- A. *Mesial surface:* is the surface which is facing towards the median line.
- B. *Distal surface:* is the surface which is facing away from the median line.

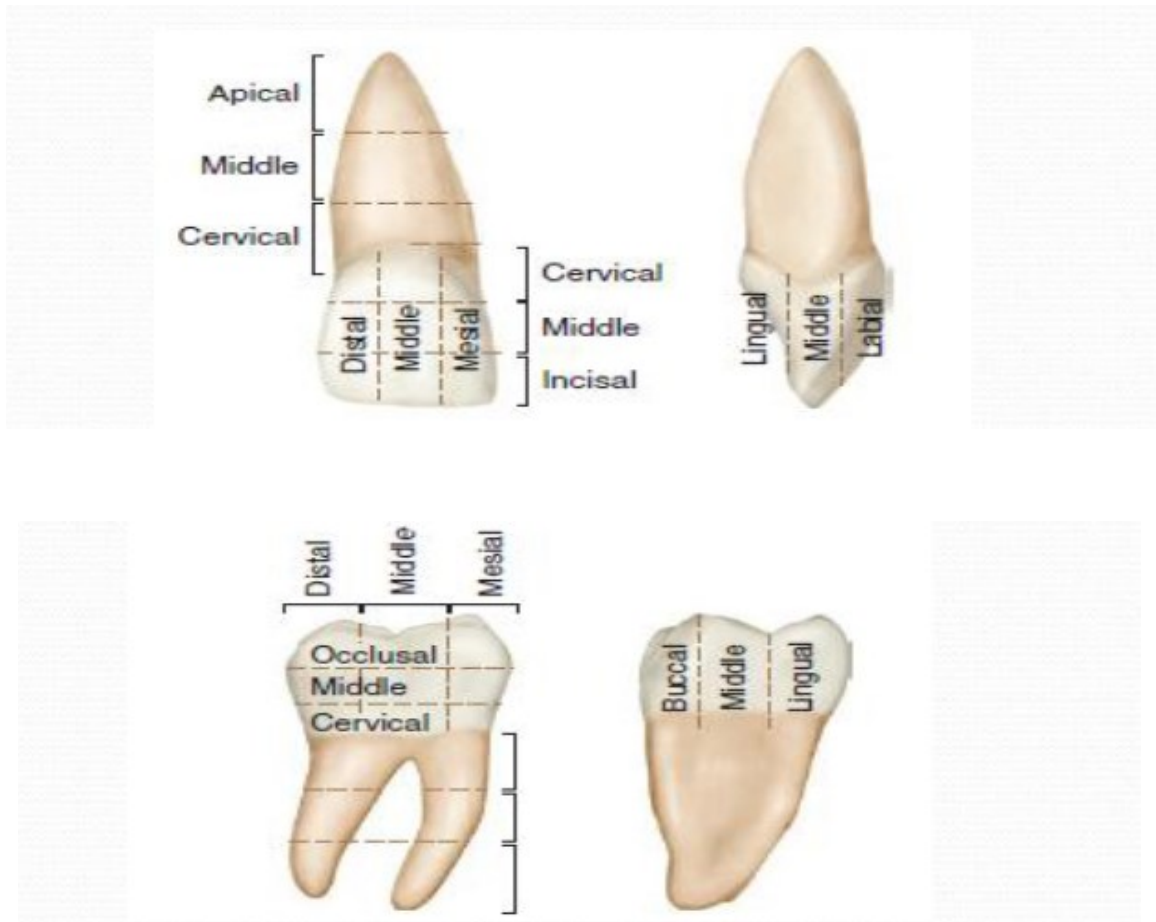
Surfaces of the teeth

- All teeth have their mesial surfaces touching the distal surfaces of the adjacent tooth except the maxillary and mandibular central incisors (both permanent and deciduous).

Division of the crown into thirds

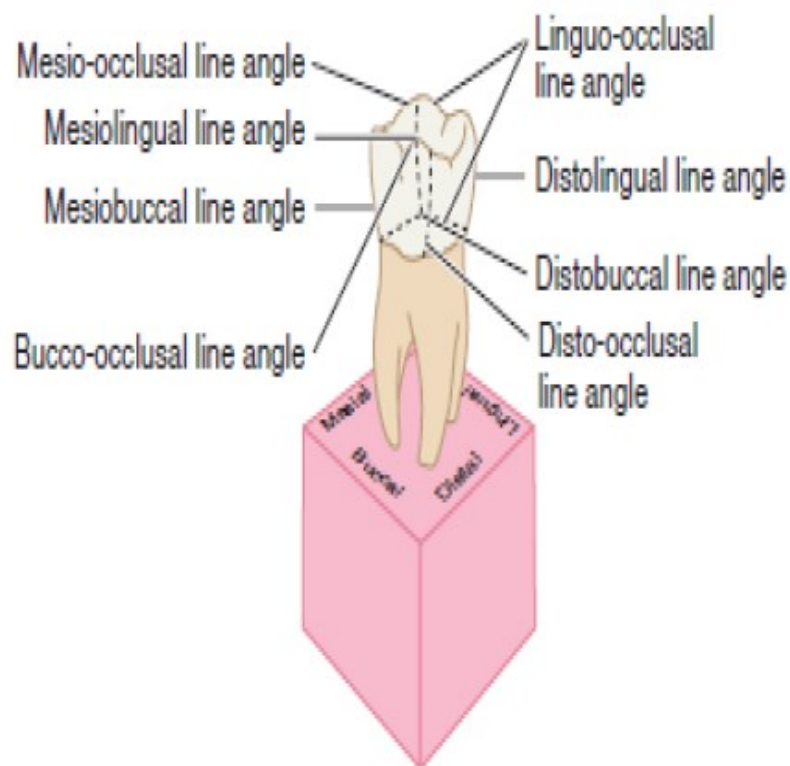
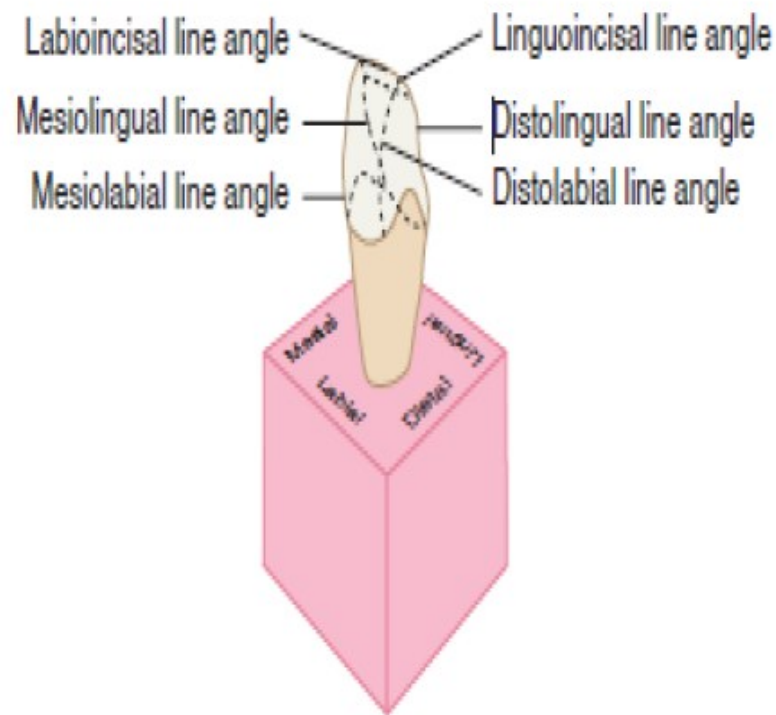


So, for description, the crown and the root are divided into thirds according to the position of the surface.



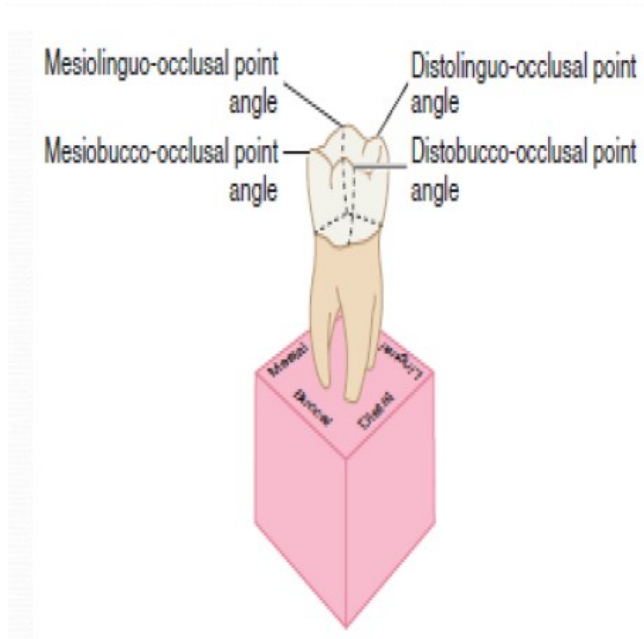
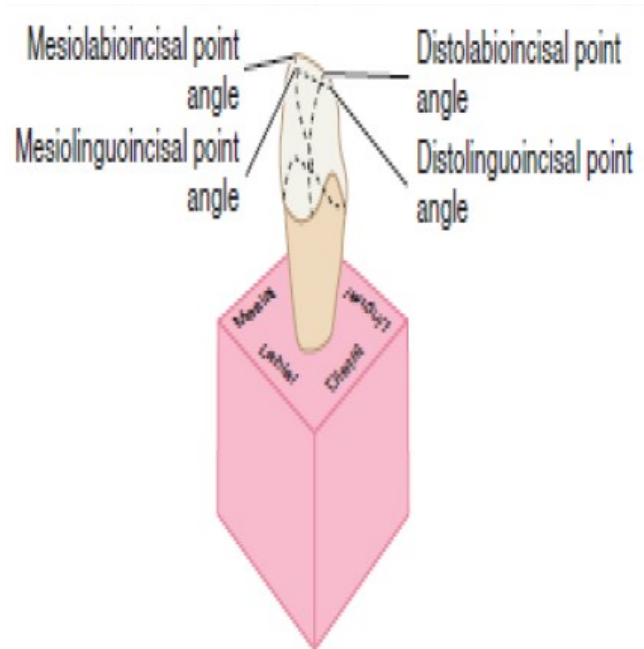
Line angle:

it is formed by the junction of two surfaces and gets its name from these surfaces. For example, mesio-labial line angle.



Point angle:

it is formed by the junction of three surfaces and gets its name from these surfaces. For example, mesio-linguo-Incisal point angle.



Great Thanks