

Anatomical landmarks

Crown and Roots

Each tooth has a crown and root. The crown is covered with enamel while the root is covered with cementum and they join at the cemento-enamel junction (CEJ) or cervical line. The four tooth tissues are enamel, dentin, cementum and pulp. The first three are known as hard tissues, the last as soft tissues. The major bulk of the tooth is dentin.

Dental pulp: is the soft tissue of the tooth that furnishes the blood and nerve supply to the tooth and present in the pulp chamber and pulp canal.

Pulp chamber: is the part of dental pulp in the crown.

Pulp canal: is the part of dental pulp in the root.

The pulp chamber is continuous with the pulp canal and collectively called as the "pulp cavity".

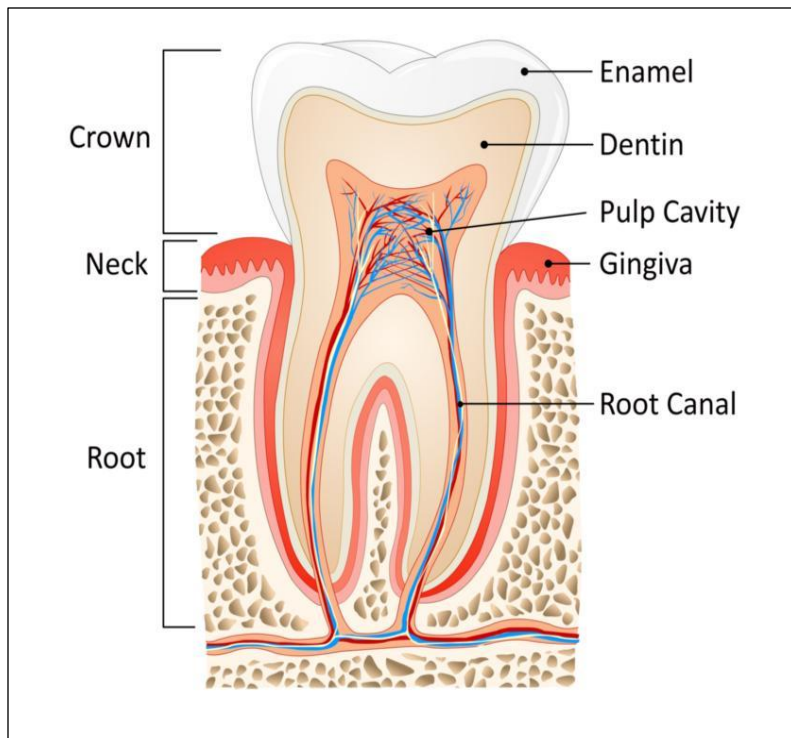
Anatomical crown: is the portion of the tooth that covered by enamel.

Clinical crown: is the portion of the tooth which is visible in the mouth.

In a healthy person the anatomical crown is larger than the clinical crown.

The number of roots:

1. Single root: in all anterior teeth, mandibular premolars and maxillary second premolar.
2. Two roots with bifurcation: in mandibular molars and maxillary first premolar.
Division of the tooth root is known as furcation.
3. Three roots with trifurcation: in maxillary molars.



Surfaces and ridges:

The crowns of incisors and canines have four surfaces and ridge, while the crowns of premolars and molars have five surfaces. The surfaces are:

1. Labial surface: is the surface which is toward the lip in incisors and canines (in anterior teeth).
2. Buccal surface: is the surface which is toward the cheek in premolars and molars (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 the 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 toward adjacent teeth in the same dental arch.
 - a. Mesial surface: is the surface which is facing toward the median line.

b. Distal surface: is the surface which is facing away from the median line.

All teeth have their mesial surfaces touching the distal surfaces of the adjacent tooth except the maxillary and mandibular central incisor (both permanent and deciduous). The area of the mesial and distal surface that touch its neighbor in the arch is called the "contact area". Division of the crown in to thirds: For description, the crown and the root are divided into thirds according to the position of the surface.

