IQRA NATIONAL UNIVERSITY

(ALLIED HEALTH SCIENCES)

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PROGRAM: BS DENTAL SEMESTER: 4th

(ASSIGNMENT)

SUBJECT: DENTAL MORPHOLOGY INSTRUCTOR: Ms. SALMA ISHAQ

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ASSIGNMENT

GENERAL CHARACTERISTICS OF DECIDUOUS TEETH



GENERAL CHARATERISTICS OF DECIDUOUS TEETH

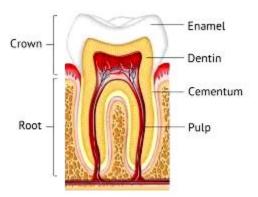
- Deciduous teeth is the official term for <u>baby teeth</u>, <u>temporary teeth</u>, <u>milk teeth</u>, <u>or primary teeth</u>
- Deciduous teeth start developing during the <u>embryonic stage</u> and then commonly begin to come in about <u>6 months</u> after birth
- Children have 20 teeth in their mouth.
- There are 10 teeth on both the top and bottom jaw and 5 in each quadrant
- Each jaw consists of specific teeth, which are incisors (cutting teeth), canines (tearing teeth) and molars (grinding teeth).

- From the midline of one side of each jaw consists of <u>2 incisors</u>, <u>1 canine</u> and <u>2 molars</u>
- These teeth are referred to as letters A, B, C, D and E
- The tooth consists of a <u>crown</u> and <u>root</u>, and the tooth is composed of different materials that aid in <u>strengthening</u>, <u>preserving and maintaining</u> its function.

Purpose of Teeth

- To breakdown food into smaller pieces to aid in the process of digestion.
- Maintains a space for permanent teeth to come through

> TOOTH STRUCTURE



- The anatomy of the tooth consists of <u>root</u> (hidden in the gum) and <u>crown</u> (visible part of the tooth).
- The <u>root</u> of the tooth functions as an anchor for the tooth and allows for blood and nerve supply to enter the tooth to maintain its viability.
- The <u>crown</u> is the surface that allows for food breakdown as opposing teeth are brought together when chewing.
- The crown and root consists of hard and soft tissue.
- The <u>hard tissue</u> covering the crown is called <u>enamel</u>, a hard mineral surface, where as the root is covered by <u>cementum</u>, a hardy mineral surface, however, it is softer compared to enamel
- The next layer under both enamel and cementum is <u>dentin</u>, the main bulk of the tooth. Dentin is considered a hard tissue; however, it is much more porous than either of the other hard tissues to <u>allow nutrients</u> to be transferred through the tooth layers.

- The next layer under dentin is the <u>pulp tissue</u> that is housed in <u>pulp cavity</u>. The
 pulp cavity has a rich <u>blood supply and nerve supply</u>, which is essential for
 maintaining tooth health.
- The root of the tooth is embedded in bone, which is covered in tissue called gingiva. The root is held in place by strands of tissue that originated from the surrounding bone and embedded into cementum. These strands of tissue are called periodontal ligaments

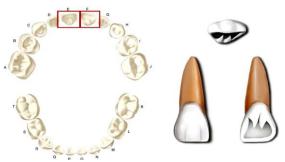
➤ Major difference b/w Baby teeth & permanent teeth

- Baby teeth have much thinner enamel than permanent teeth (enamel is the hard white surface on the tooth)
 - PURPOSE: which makes it easier for a cavity to spread, and spread quickly. Further complicating things, the enamel on the side of the tooth is usually razor thin, which can make bonding white fillings difficult when the enamel has been lost due to decay or fracture
- 2) Baby teeth are softer than permanent teeth
 - PURPOSE: This makes them especially susceptible to acid found in liquids such as soda, juice and flavored waters. Repeated, frequent exposure, even to watered-down-juices results in soft enamel that is more likely to break down and develop cavities. Softer enamel also means that there will be more visible wear or flat surfaces seen on children who grind their teeth
- 3) Baby teeth are whiter than permanent teeth!
 - PURPOSE: This is especially noticeable when permanent teeth begin to erupt next to baby teeth. Rest assured, the color of permanent teeth is supposed to be a bit more yellow and the color will be less noticeable once all of the baby teeth have been lost
- 4) Baby teeth have very large nerves and nerve canals called pulp chambers, relative to the size of the tooth
 - PURPOSE: This means that even small cavities can affect the nerve, leading to nerve inflammation or infection. Trauma such as an impact to a baby tooth can also lead to nerve inflammation and eventual nerve death more often than in permanent teeth

- 5) Baby teeth in the back of the mouth are pressed next to each other like two cubes that touch
 - PURPOSE: Permanent teeth, however, are more rounded. Therefore their point of contact with the neighboring tooth is much smaller.

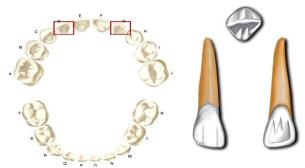
> DECIDUOUS TEETH

> MAXILLARY CENTRAL INCISOR



- Human tooth in the front upper jaw, or maxilla and is usually the most visible of all teeth in the mouth.
- It is located mesial (closer to the midline of the face) to the maxillary lateral incisor
- Two in number (Right max C-I, Left max C-I)
- Wider mesiodistally than incisocervically (only tooth)
- No mamelons resulting in a smooth labial surface
- more prominent cingulum and marginal ridges than permanent central
- There is typically a single cusp on each tooth, called an incisal ridge or incisal edge.
- Eruption 8-12 MONTHS and Shedding 6-7 yrs
- Notation Universal #E #F, FDI #51 #61, Palmer #A #A
- From mesial and distal aspect it is triangular in shape and from labial, lingual aspect the crown is trapezoidal in shape (mesio-distally wider)
- One root
 FUNCTION
- Esthetic
- Phonetic
- Cutting, biting, mastication, shearing

MAXILLARY LATERAL INCISOR



- 2nd from the midline
- It contact with central incisor mesially
- It contact with canine distally
- Smaller than C-I
- Two in number (Right max L-I, Left max L-I)
- Smaller than Maxillary Central in all dimensions
- longer incisocervically than mesiodistally
- There are generally no cusps on the teeth, but the rare condition known as <u>talon cusps</u> are most prevalent on the maxillary lateral incisors
- Eruption 9-13 MONTHS and shedding 7-8 yrs
- Notation Universal #D #G, FDI #52 #62, Palmer #B #B
- From mesial and distal aspect it is triangular in shape and from labial, lingual aspect the crown is trapezoidal in shape (mesio-distally wider)
- One root

FUNCTION

- Esthetic
- Phonetic
- Cutting, biting, mastication, shearing
- Support for lips

MAXILLARY CANINE

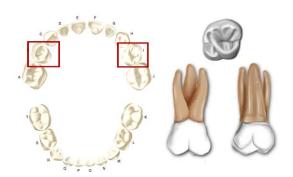


- Located laterally (away from the midline of the face) from both maxillary lateral incisors of the mouth
- Mesial (toward the midline of the face) from both molars
- Both the maxillary and mandibular canines are called the <u>"cornerstone"</u> of the mouth because they are all located three teeth away from the midline, and separate the molars from the incisors
- Mesial cusp slope longer than the distal (opposite from ALL other canines)
- Cusp offset to the distal
- Well-developed cingulum
- There is a single cusp on canines a.k.a Cuspid
- Eruption 16-22 MONTHS and shedding 10-12 yrs
- One root
- It is the longest tooth in total length (from the root to the incisal edge) in the mouth
- Canines are also the only anterior teeth with a cusp
- Two in number (Right max canine, Left max canine)
- Notation Universal #C #H, FDI #53 #63, Palmer #C #C
- From mesial and distal aspect it is triangular in shape and from labial, lingual aspect the crown is pentagonal in shape

FUNCTION

- Esthetic
- Phonetic
- Cutting, biting, mastication, shearing, Tearing, grinding
- Support for lips

➤ MAXILLARY 1ST MOLAR



- 4th from mad-line
- Mesial contact with the MAXILLARY CANINE and distal contact with ^{2nd} molar
- Have four cusps
- Largest tooth in mouth
- Resembles premolar
- 4 cusps (MB&ML>DB&DL)
- 3 roots
- Prominent transverse ridge
- Prominent buccal cervical ridge
- Three roots
- Eruption 13-19 MONTHS and shedding 9-11 yrs
- Notation Universal #B #I, FDI #54 #64, Palmer #D #D
- There may also be a fifth smaller cusp on the palatal side known as the <u>Cusp of Carabelli</u>
- From buccal & palatal Trapezoidal, from occlusal rhomboidal, from proximal (mesial, distal) trapezoidal
- Have four lobes (mesiobuccal, distobuccal, mesiolingual, and distolingual lobes)
 FUNCTION
- Esthetic (less)
- Phonetic (less)
- Cutting, biting, mastication, grinding
- Support for lips

➤ MAXILLARY 2nd MOLAR



- 5th from mad-line Mesial contact with the 1ST molar
- Smaller then 1st molar
- Resembles permanent maxillary first molar but smaller in all dimensions
- Cusp of Carabelli
- Larger than primary maxillary first molar
- Three roots
- Eruption 25-33 months and shedding 10-12 yrs
- Notation Universal #A #J, FDI #55 #65, Palmer #E #E
- Have four cusps (mesiobuccal, distobuccal, mesiolingual, and distolingual lobes)
 FUNCTION
- Esthetic (less)
- Phonetic (less)
- Cutting, biting, mastication, grinding
- Support for lips

MANDIBULAR CENTRAL INCISOR



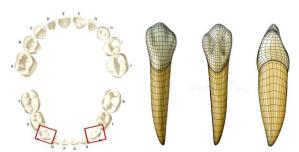
- The mandibular central incisor is the tooth located on the jaw, adjacent to the midline of the face
- It is mesial (toward the midline of the face) from the both mandibular lateral incisors
- There are no cusps on the tooth
- Very symmetrical
- Incisal edge centered over the root
- Smooth lingual surface
- Prominent cingulum
- Surface area of the tooth used in eating is called an incisal ridge or incisal edge
- Some minor difference b/w deciduous and permanent mandibular C.I
- The mandibular central incisors are usually the first teeth to appear in the mouth, typically around the age of 6-8 months
- Two in number (Right man C-I, Left man C-I)
- Eruption 6-10 MONTHS and Shedding 6-7 yrs
- Notation Universal #P #O, FDI #81 #71, Palmer #A #A <u>FUNCTION</u>
- Esthetic
- Phonetic
- Cutting, mastication (CHEWING), shearing
- Support for lips

MANDIBULAR LATERAL INCISOR



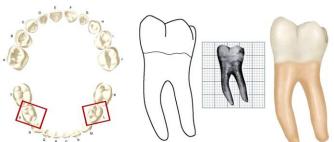
- The mandibular LATERAL incisor is the tooth located distally (away from the midline of the face) from the both mandibular canines
- There are no cusps on the tooth
- Wider and longer with more developed cingulum than mandibular central
- Incisal edge slopes distally
- Cingulum offset to the distal
- Surface area of the tooth used in eating is called an incisal ridge or incisal edge
- Though relatively the same, there are Some minor difference b/w deciduous and permanent mandibular L.I
- Two in number (Right man L-I, Left man L-I)
- Eruption 10-16 MONTHS and Shedding 7-8 yrs
- Notation Universal #Q #N, FDI #82 #72, Palmer #B #B FUNCTION
- Esthetic
- Phonetic
- Cutting, mastication (CHEWING), shearing
- Support for lips

MANDIBULAR CANINE



- Mandibular canine is the tooth Located distally (away from the midline of the face)
 from the both mandibular lateral incisors of the mouth
- But Mesially (toward the midline of the face) from both molars
- Both the maxillary and mandibular canines are called the <u>"cornerstone"</u> of the mouth because they are all located three teeth away from the midline, and separate the molars from the incisors
- The canine teeth are able to withstand the tremendous lateral pressures from chewing
- Distal cusp slope is longer than mesial cusp slope
- Smaller faciallingually than maxillary canine
- Smooth lingual surface with shallow lingual fossa
- There is a single cusp on canines a.k.a Cuspid
- There are Some minor difference b/w deciduous and permanent mandibular L.I
- Eruption 17-23 MONTHS and shedding 9-12 yrs
- One root
- Canines are also the only anterior teeth with a cusp
- Two in number (Right man canine, Left man canine)
- Notation Universal #R #M, FDI #83 #73, Palmer #C #C FUNCTION
- Esthetic
- Tearing, grinding
- Support for lips

➤ MANDIBULAR 1ST MOLAR



- Also called six year molar, 4th from mad-line
- Mesial contact with the MANDIBULAR CANINE and distal contact with ^{2nd} molar
- Three roots
- It is located on the mandibular (lower0 arch of the mouth, and generally opposes the maxillary (upper) first molar
- There are usually 4 or 5 well developed cusps on mandibular first molar; 2 buccal, 2 lingual, 1 distal
- Unlike any other tooth
- 4 cusps (MB&DB>ML&DL)
- Prominent buccal cervical ridge
- MB-ML transverse ridge
- On occlusal surface developmental and supplementary groves like M shaped
- Great difference b/w baby and permanent mandibular 1st molar
- Eruption 13-19 MONTHS and shedding 9-11 yrs
- 2 in number (right man 1st molar, left man 1st molar)
- Notation Universal #S #L, FDI #84 #74, Palmer #D #D FUNCTION
- Esthetic (less)
- Phonetic (less)
- Mastication (CHEWING), grinding
- Support for lips

► MANDIBULAR 2nd MOLAR



- The mandibular 2nd molar is the tooth located distally (away from the midline of the face) from both the mandibular first molars of the mouth
- There are usually 4 or 5 cusps on mandibular second molars; 2 palatal, 2 buccal
- There are great differences between the deciduous (baby) mandibular molars and those of the permanent mandibular molar
- Resembles permanent mandibular first molar
- 5 cusps
- The 3 buccal cusps are nearly equal in size
- Eruption 23-31 MONTHS and shedding 10-12 yrs
- 2 in number (right man 2nd molar, left man 2nd molar)
- Notation Universal #T #K, FDI #85 #75, Palmer #E #E FUNCTION
- Esthetic (less)
- Phonetic (less)
- Mastication (CHEWING), grinding
- Support for lips



THANK YOU SO MUCH