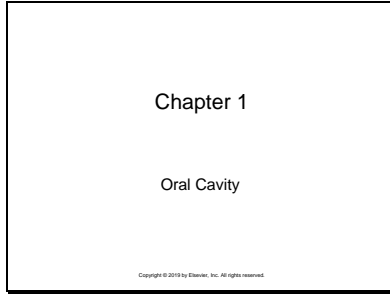


Slide 1



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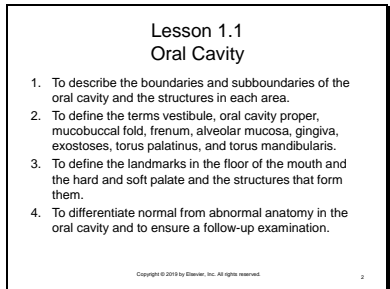
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Slide 2



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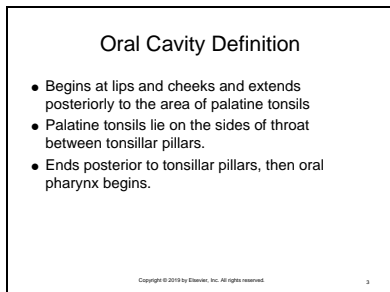
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Slide 3



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Slide 4

**Oral Cavity Definition (Cont.)**

- Digestive system shares common pathway with respiratory system, between oral pharynx and laryngeal pharynx.
- It then goes on to the esophagus and the rest of the digestive system.
- Respiratory system starts at nasal cavity and includes nasal pharynx, oral pharynx, and laryngeal pharynx, then continues on into larynx, trachea, bronchi, and lungs.

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Slide 5

**Oral Cavity Sections**

Two parts of oral cavity

1. Vestibule
  - Space between lips or cheeks and teeth
2. Oral cavity proper
  - Area surrounded by teeth or alveolar ridges back to palatine tonsils.
  - Includes region from the floor of mouth upward to hard and soft palates

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Slide 6

**Vestibule**

- Lips—junction between skin of the face and mucosa of the oral cavity
- Vermilion zone—a transitional zone of reddish tissue between these two areas
- Philtrum—indentation at midline on skin of the upper lip, derived from the embryonic medial nasal processes

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Slide 7

**Vestibule Anterior/Posterior Borders**

- Vestibular anterior border
  - The lips (labia)
- Vestibular lateral border
  - The cheeks (bucca)
- Vestibular posterior border
  - The anterior border of the ramus of the mandible covered with soft tissue
- Cheek is formed largely by buccinator muscle, covered with skin on the outside and mucous membrane on the inside.

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Slide 8

**Vestibule Anterior/Posterior Borders (Cont.)**

Anterior and Posterior Borders

- Buccinator muscle extends back from the corners of the mouth to join with muscles of upper throat wall.
- Crosses in front of the mandibular ramus from lateral position to medial position
- Zygomaticoalveolar crest—ridge of bone at the upper posterior vestibular space; beginning of the anterior part of the zygomatic arch (cheekbone)

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Slide 9

**Vestibule: Superior/Inferior Borders**

- Mucobuccal or mucolabial fold—mucosa of the lips or cheeks that turns toward the gingival tissue
- Alveolar mucosa—movable mucosa lying against alveolar bone
  - Generally reddish in color due to blood vessels underneath thin mucosa
- Mucogingival junction—where alveolar mucosa becomes tightly attached to bone; beginning of gingiva

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Slide 10

**Vestibule: Gingiva**

- Normal color of gingiva is pink because mucosal layer is thicker and blood vessels do not impart as much color.
- In patients with darker skin color, some pigmentation to the gingiva is evident.

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Slide 11

**Vestibule: Frenum**

- Labial frenum—fold of connective tissue at the midline in upper and lower lips
- Upper frenum is usually more pronounced than the lower.
  - > Attachment of the maxillary frenum may extend to crest of the alveolar ridge or over it.

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Slide 12

**Vestibule: Frenum (Cont.)**

- Diastema—when maxillary frenum is so firmly attached that erupting central incisors may be pushed slightly aside, creating a space between them (A)
- Gingival recession caused by mandibular labial frenum extending too close to gingiva and pulling downward on the tissue

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Slide 13

**Vestibule: Frenum (Cont.)**

- Less well-defined frena are evident in maxillary and mandibular canine areas at the area labeled mucobuccal fold, and in a similar area above it in the maxillary arch.

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Slide 14

**Other Clinical Manifestations of the Vestibule**

- Coronoid process—part of the mandible that can be felt when the patient opens wide; located in the posterior-superior part of the vestibule, adjacent to the maxillary third molar area
- Alveolar bone loss—can occur when teeth are lost

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Slide 15

**Other Clinical Manifestations of the Vestibule (Cont.)**

- Mucosa—contains many small salivary glands
  - Fordyce granules—misplaced sebaceous glands in the mucosa of lips, cheeks, and retromolar pad area; appear as yellowish granular structures embedded in the mucosa
- Buccal alveolar bone—bony growths called extoses may grow on the buccal cortical plate of the mandible and maxillae
  - Generally seen more often on mandible than maxilla

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Slide 16

**Oral Cavity Proper:  
Hard Palate Features**

- Rugae—transverse ridges of epithelial and connective tissue in anterior hard palate
  - Covered with keratinized epithelium
- Incisive papilla—bulge of tissue posterior to central incisors at midline
- Incisive foramen—under incisive papilla
  - Carries nasopalatine nerves and blood vessels

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Slide 17

**Oral Cavity Proper:  
Greater and Lesser Palatine Foramina**

- Greater palatine foramina—two openings in bone on each side, lingual to second and third maxillary molars
  - Carry nerves and blood vessels to the hard palate
- Lesser palatine foramen—carry nerves and blood vessels to soft palate

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Slide 18

**Oral Cavity Proper:  
Hard Palate Regions**

- Tissue beneath palatal epithelium varies from region to region in the palate.
  - Midline—connective tissue is thin, and palate feels hard and bony
  - Anterolateral area—connective tissue contains fat cells and is thicker
  - Posterolateral portion—contains minor salivary glands that secrete mucus

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Slide 19

**Oral Cavity Proper:  
Hard Palate Variations**

- Shape and size of hard palate vary from individual to individual.
- It may be wide or narrow, have high, arching curvature or vault, or be flat in its contours.
- Torus palatinus—excess bone growth that can occur in the midline of hard palate

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Slide 20

**Oral Cavity Proper Landmarks**

- Junction of hard and soft palates forms double curving line.
- Posterior nasal spine of palatine bone is the primary landmark at the midline.
- Fovea palatinae—two small depressions are located on each side of spine.

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Slide 21

**Oral Cavity Proper: Soft Palate**

- Stretches back from hard palate
- Uvula—downward projecting muscle at the most posterior portion at the midline
- Levator veli palatini muscle—performs soft palate movement by pulling soft palate up and back until it contacts the posterior throat (pharyngeal) wall

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Slide 22

**Lateral Borders of Soft Palate**

- Bounded primarily by teeth and associated mucosa
- In the posterior lateral part of the oral cavity, boundary is the palatine tonsil and associated pillars.
- Posterior pillar or palatopharyngeal arch or fold—prominent fold behind tonsil, extending from soft palate downward into lateral pharyngeal wall
- Anterior pillar or palatoglossal arch or fold—immediately in front of palatine tonsil
- Palatopharyngeal and palatoglossal muscles form these folds.

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Slide 23

**Posterior Borders of Soft Palate**

- Retromolar pad—small elevation of tissue posterior to mandibular third molar

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Slide 24

**Tonsils and Oral Pharynx Examination**

- Fauces—space between the left and right tonsils and their pillars
- Depressing the tongue and asking patient to say “ahhh” enables examination beyond oral cavity into the pharynx.

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Slide 25

**Structures of the Tongue**

- Filiform
- Fungiform
- Vallate
- Rudimentary foliate papillae
- Underside or ventral side of the tongue shows many blood vessels close to the surface.

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Slide 26

**Tongue and Floor of Mouth**

- Lingual frenum or frenulum—fold of tissue extending from near the tip of the tongue down to the floor of the mouth
- If frenum is attached close to tip of the tongue, the tongue will have limited movement.

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Slide 27

**Tongue and Floor of Mouth (Cont.)**

- Sublingual caruncle—small elevation on each side at the base of the lingual frenum
  - > This is the opening for ducts of two of the major salivary glands, the submandibular and sublingual glands.
- Sublingual fold—fold of tissue extending from sublingual caruncle back along floor of the mouth on either side

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Slide 28

**Tongue and Floor of Mouth (Cont.)**

- Small openings of ducts of the sublingual salivary gland can be found along the anterior and middle parts of sublingual fold.
- Mandibular tori—bony swellings on lingual surface of the mandible at the canine area often occur

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Slide 29

**Tongue and Floor of Mouth (Cont.)**

- Floor of the mouth is supported by paired mylohyoid muscles, which form a sling from mylohyoid line on one side of medial surface of the mandible to the same line on other side.
  - Contraction of these muscles raises tongue and floor of mouth.
- Oral tissue beneath tongue is one of the thinnest in the oral cavity and therefore sensitive to trauma.

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Slide 30

**Other Clinical Manifestations of the Oral Cavity**

- Problems in other parts of the body may show up in the oral cavity.
- All who view the intraoral anatomy are responsible to be aware of what normal anatomy looks like, including dental assistants, laboratory technologists, dental hygienists, and dentists.
- Legally, dentist bears primary responsibility for much of the diagnosis and treatment, but every member of the team should note anything abnormal.

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