

RADIOGRAPHIC ANATOMICAL LANDMARKS

Periapical film

a) maxilla

-medial and lateral pterygoid plates

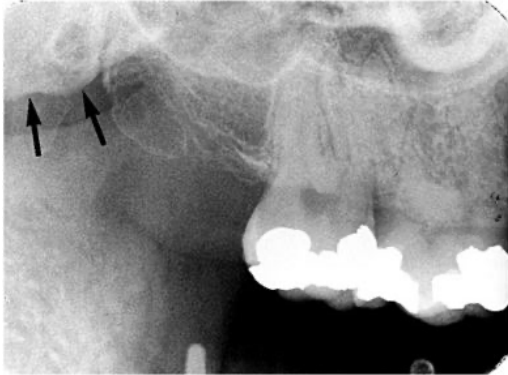


FIG. 9-39 Pterygoid plates (arrows) located posterior to the maxillary tuberosity.

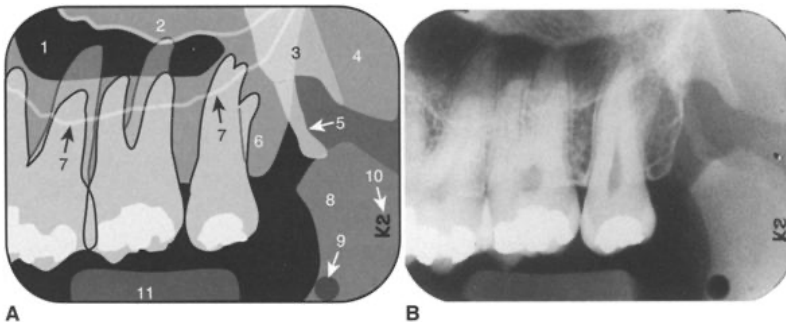


FIGURE 1-42

Identify the indicated structures.

2. zygomatic arch
3. medial pterygoid plate (anterior part of lateral pterygoid plate is also superimposed here)
4. lateral pterygoid plate
5. hamular process of medial pterygoid plate
6. maxillary tuberosity
7. floor of maxillary sinus
8. coronoid process of mandible

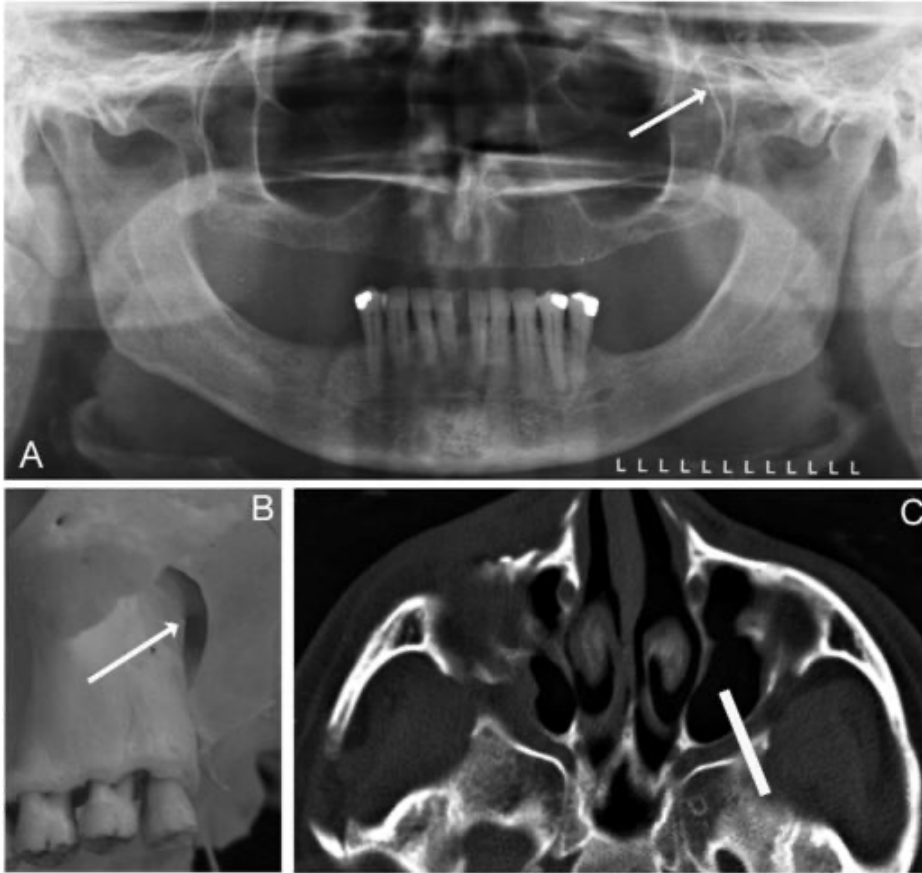


FIG. 10-21

The pterygomaxillary fissure, a space between the posterior surface of the maxilla and the anterior border of the pterygoid plates. A shows the inverted teardrop shape of the fissure on a panoramic image. B shows the fissure on a dried skull. C shows the approximate section of the panoramic image layer through the pterygomaxillary fissure on an axial CT section (white bar).

(White, Stuart C.. *Oral Radiology: Principles and Interpretation, 5th Edition*. C.V. Mosby, 122003.).

-hamulus



FIG. 9-40 The hamular process (arrow) extends downward from the medial pterygoid plate.

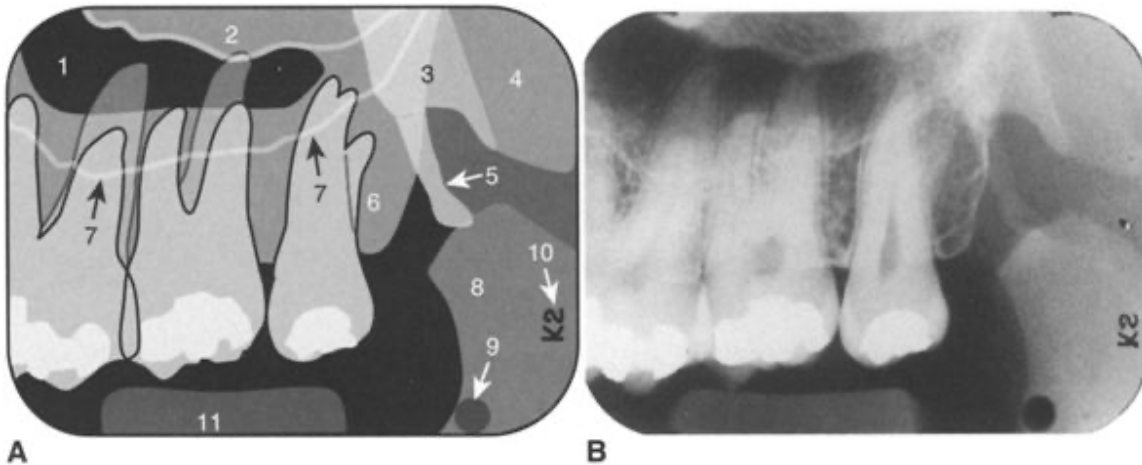


FIGURE 1-42

Identify the indicated structures.

- 5. hamular process of medial pterygoid plate

-maxillary tuberosity & -coronoid process

FIG. 9-58 Coronoid process of the mandible (*arrows*) superimposed on the maxillary tuberosity.

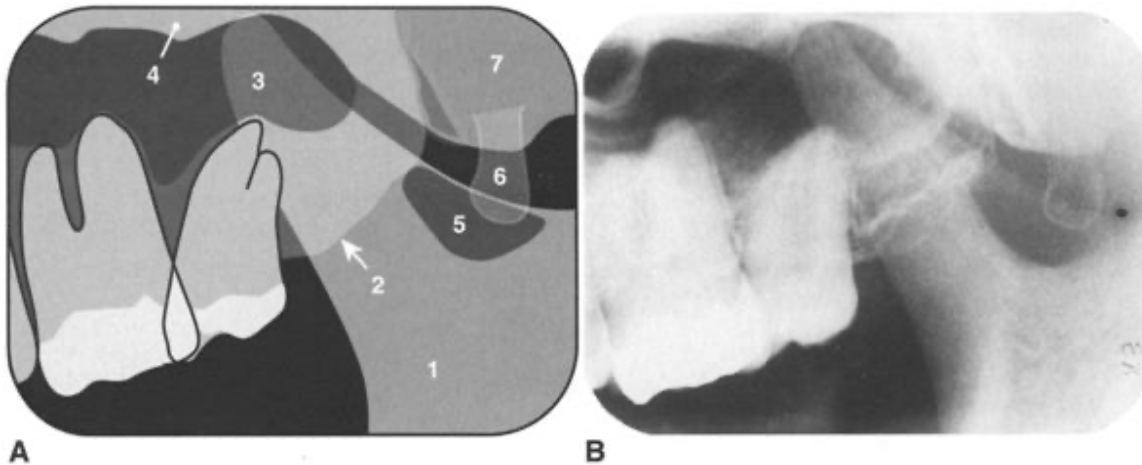


FIGURE 1-41

Identify the indicated structures.

- 2. margin of maxillary tuberosity
- 6. hamular process of medial pterygoid plate
- 7. lateral pterygoid plate

-floor of maxillary sinus

FIG. 9-30 The inferior border of the maxillary sinus (*arrows*) appears as a thin radiopaque line near the apices of the maxillary premolars and molars.

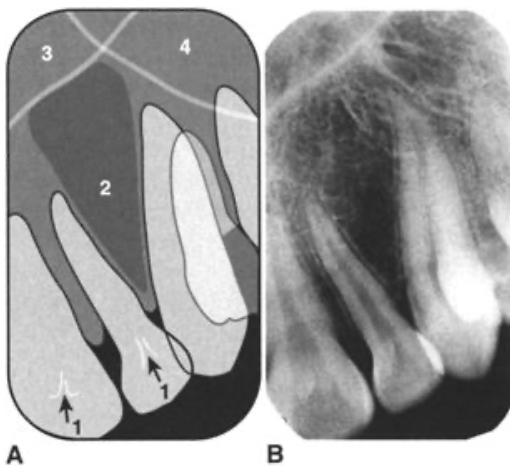
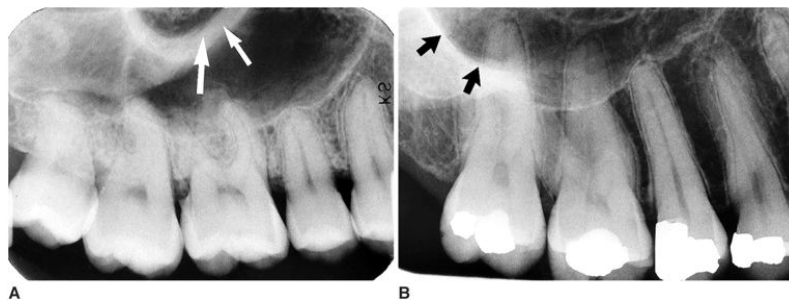


FIGURE 1-34
Identify the indicated structures

4. maxillary sinus

-zygomatic process and arch



The zygomatic process of the maxilla (*arrows*) protrudes laterally from the maxillary wall. Its size may be quite variable: small with thick borders (A) or large with thin borders (B).

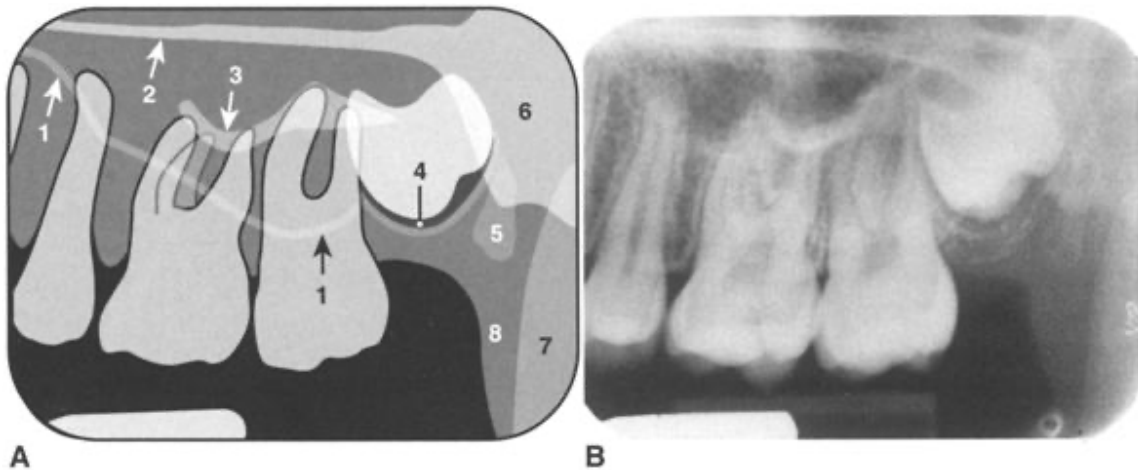


FIGURE 1-44

Identify the indicated structures.

1. floor of maxillary sinus
2. hard palate/floor of nose
3. zygomatic process of maxilla
4. impacted wisdom tooth
5. hamular process of medial pterygoid plate
6. lateral pterygoid plate
7. coronoid process of mandible

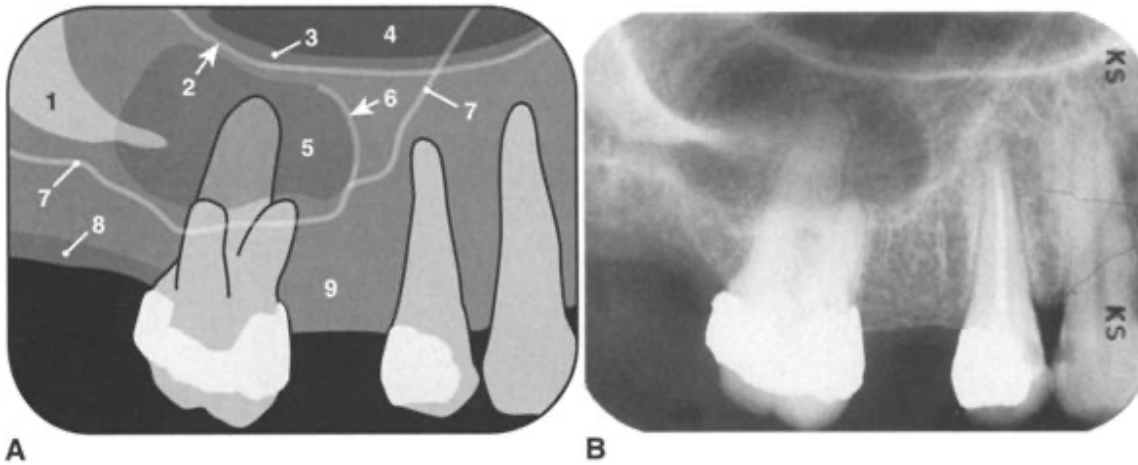


FIGURE 1-35

Identify the indicated structures.

1. zygomatic process of maxilla
5. maxillary sinus air space

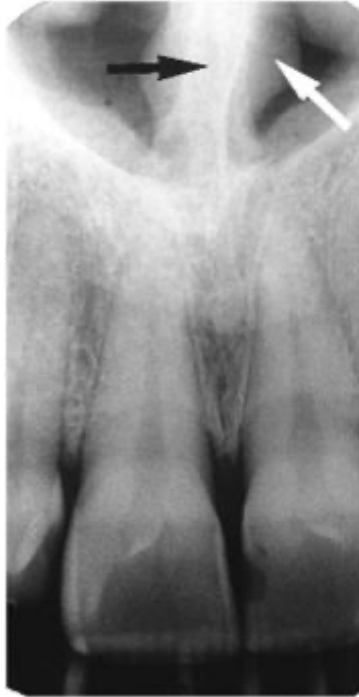
-junction of nasal fossa and maxillary sinus

FIG. 9-31 The anterior border of the maxillary sinus (*white arrows*) crosses the floor of the nasal fossa (*black arrow*).



-nasal septum

The nasal septum (*black arrow*) arises directly above the anterior nasal spine and is covered on each side by nasal mucosa (*white arrow*).



-anterior nasal spine

FIG. 9-17 The anterior nasal spine is seen as an opaque V-shaped projection from the floor of the nasal fossa in the midline (*arrow*).



-turbinates/conchae of ethmoid

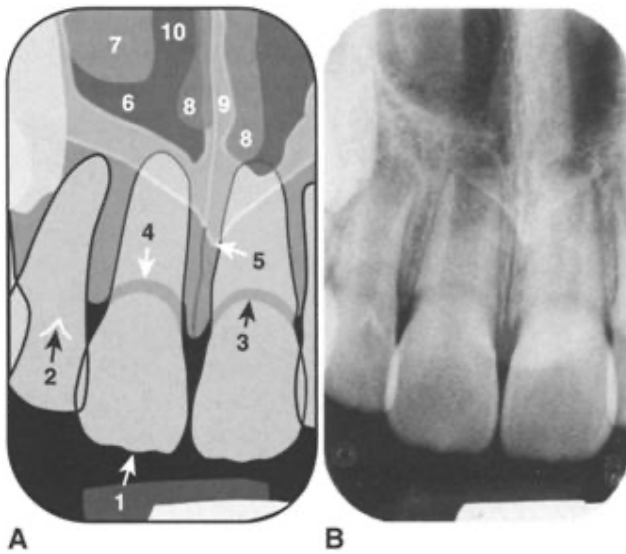


FIGURE 1-30

Identify the indicated structures.

- 7. soft tissue of inferior turbinate
- 5. anterior nasal spine

-median palatal suture; intermaxillary suture

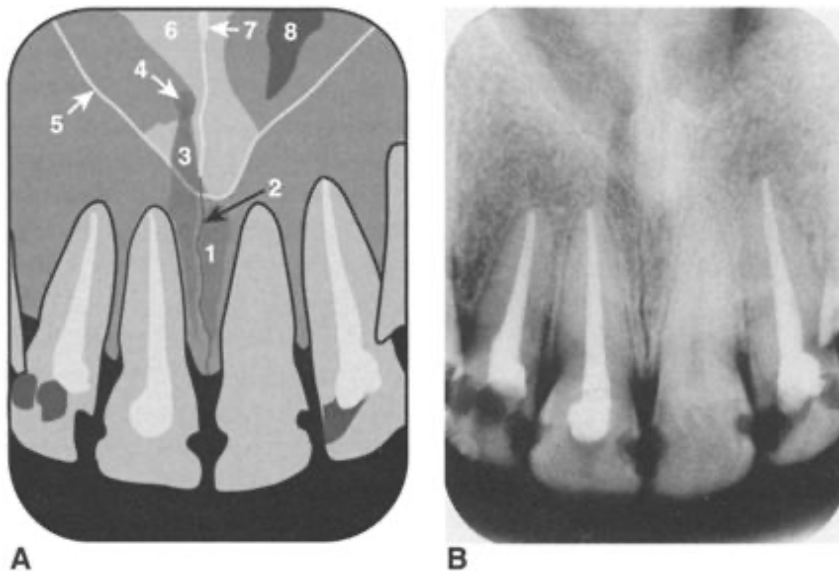


FIGURE 1-17

Identify the indicated structures.

1. incisive foramen
2. median maxillary suture
3. incisive canal
4. superior foramen of incisive canal (in floor of nose)

-incisive foramen

FIG. 9-24 The lateral walls of the nasopalatine canal (*arrows*) extend from the incisive foramen to the floor of the nasal fossa.

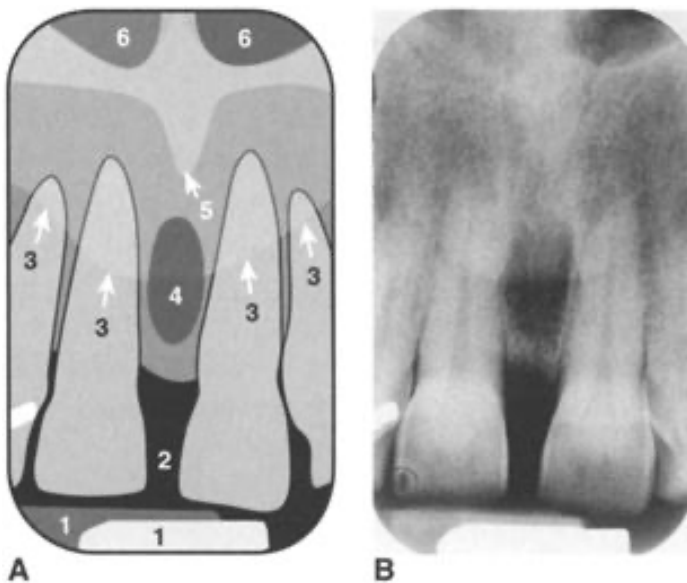
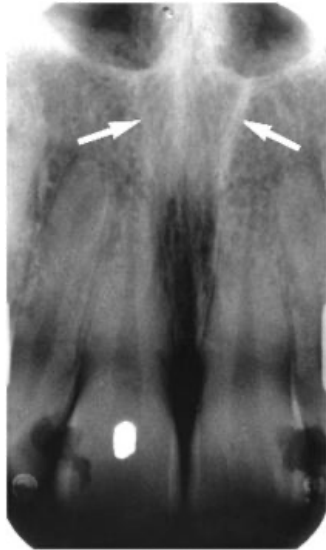
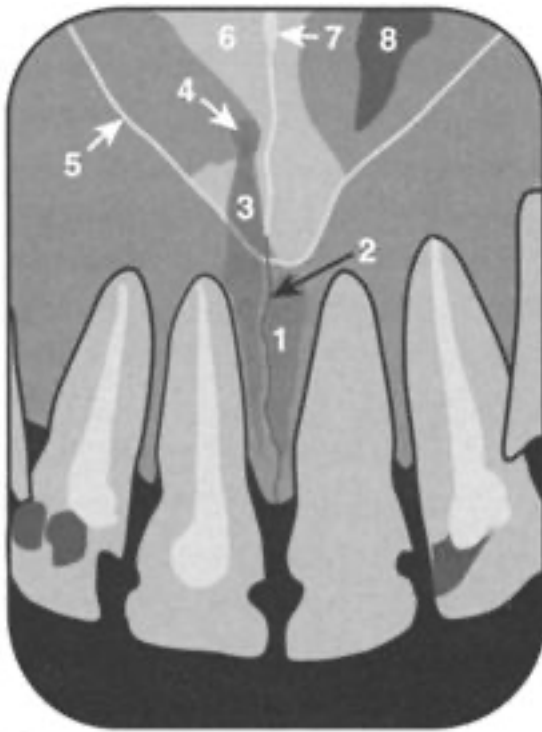


FIGURE 1-29

Identify the indicated structures.

- 4. incisive foramen
- 5. anterior nasal spine
- 6. nasal fossa

-nasopalatine duct(s); incisive canal(s)



A
FIGURE 1-17
Identify the indicated structures.

3. incisive canal

b) mandible

-inferior alveolar canal; mandibular canal

FIG. 15-7 A cropped panoramic image displaying a lesion (developmental salivary gland defect) below the inferior alveolar canal and thus unlikely to be of odontogenic origin.

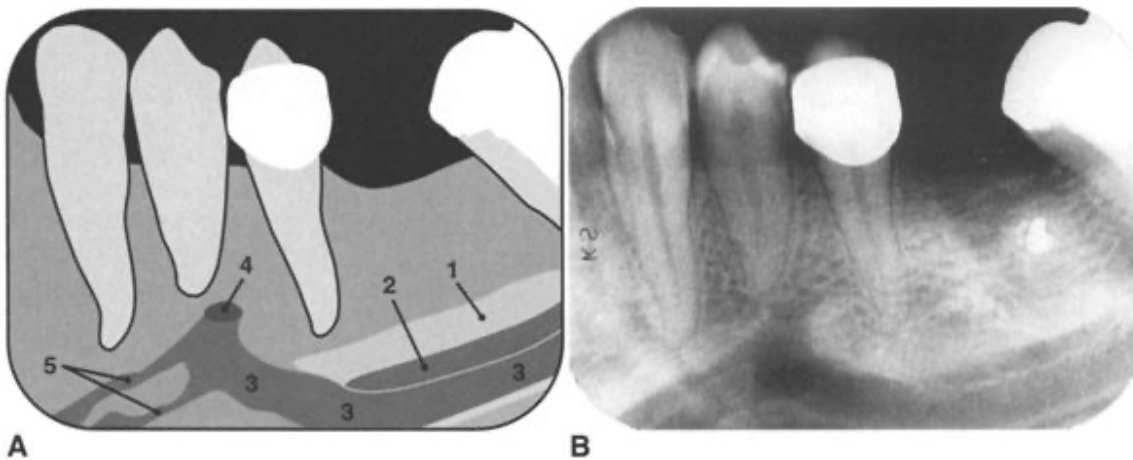


FIGURE 1-58

Identify the indicated structures.

1. internal oblique ridge
3. inferior alveolar canal (mandibular canal)
4. mental foramen

-external oblique line/ridge

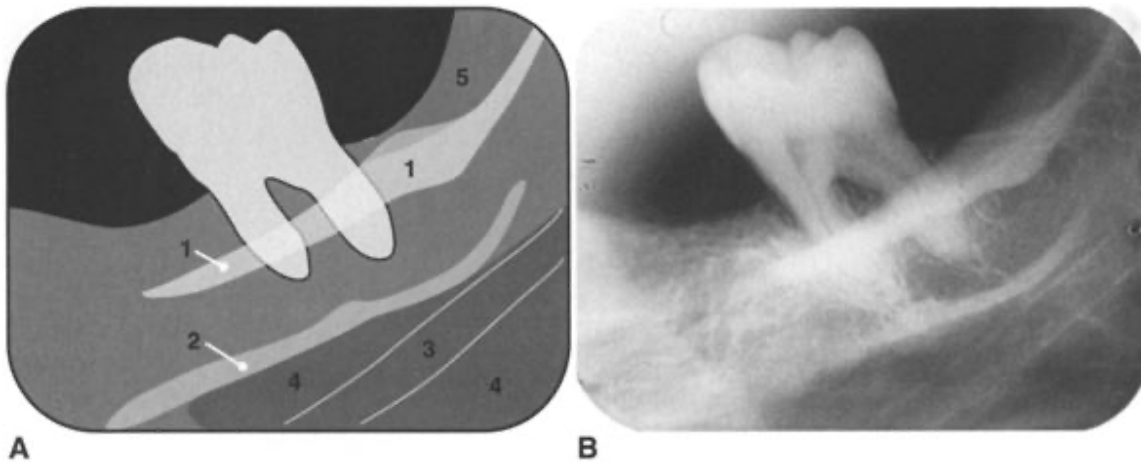


FIGURE 1-56

Identify the indicated structures.

1. external oblique ridge
2. internal oblique ridge
3. inferior alveolar canal

-internal oblique line/ridge; mylohyoid line

FIG. 9-54 The mylohyoid ridge (*arrows*) may be dense, especially when a radiograph is exposed with excessive negative angulation.

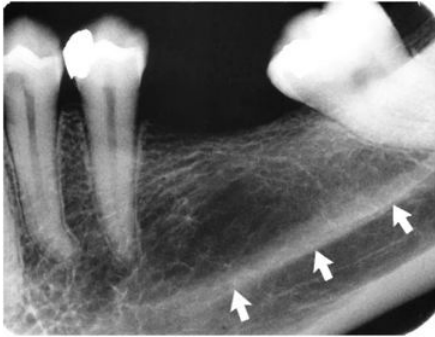


FIG. 9-53 Mylohyoid ridge (arrows) running at the level of the molar apices and above the mandibular canal.

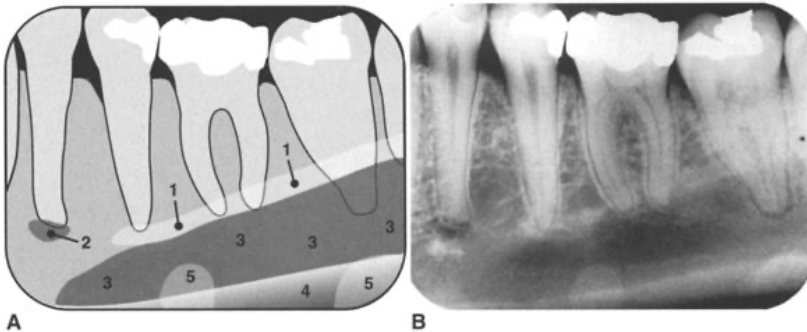


FIGURE 1-59

Identify the indicated structures.

1. internal oblique ridge
2. mental foramen

-mental foramen

FIG. 9-47 The mental foramen (*arrow*) appears as an oval radiolucency near the apex of the second premolar.

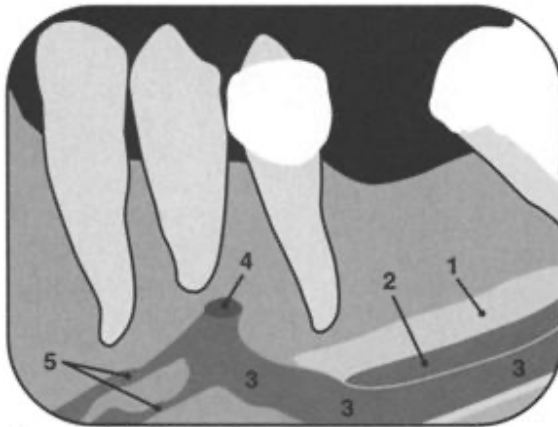


FIGURE 1-58

Identify the indicated structures.

4. mental foramen

-lingual foramen

Lingual foramen (*arrow*), with a sclerotic border, in the symphyseal region of the mandible.



-genial tubercles

The genial tubercles (*arrow*) appear as a radiopaque mass, in this case without evidence of the lingual foramen.

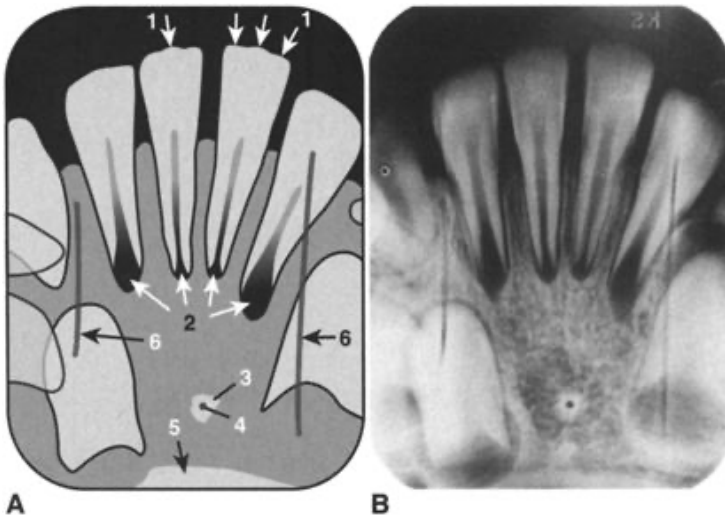


FIGURE 1-49

Identify the indicated structures.

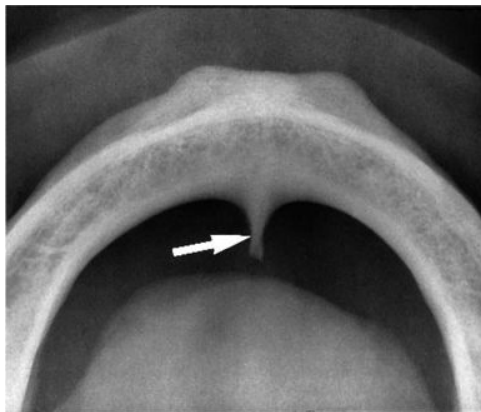
- 3. genial tubercles
- 4. mental foramen

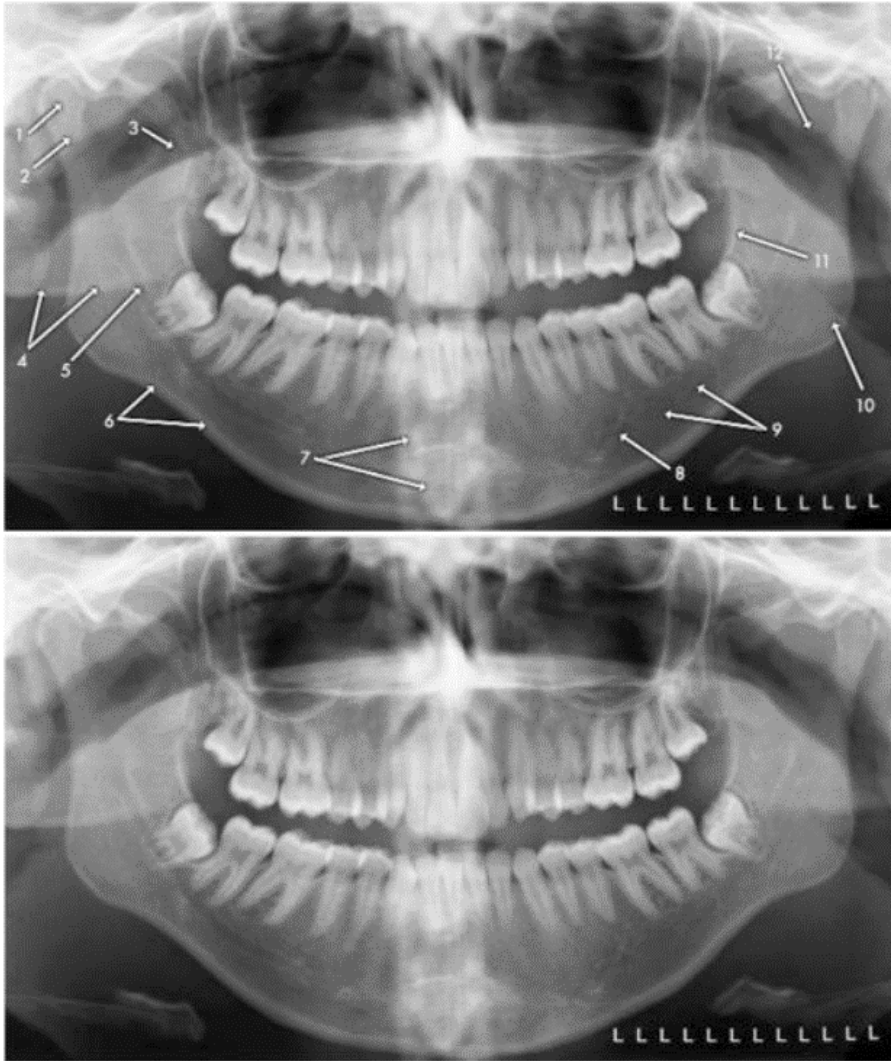
Bitewing film

Panoramic film

- orbit**
- nasal fossa
- tubينات/conchae of ethmoid
- maxillary sinus**
- palatal process of maxilla
- nasopalatine duct(s); incisive canal(s)
- zygomatic arch**
- spine of sphenoid
- condyle**
- coronoid process**
- maxillary tuberosity**
- medial and lateral pterygoid plates
- coronoid/sigmoid notch**
- glenoid fossa**
- styloid process
- mastoid process
- external oblique line/ridge**
- mandibular foramen**
- inferior alveolar canal; mandibular canal**
- mental foramen**
- genial tubercles

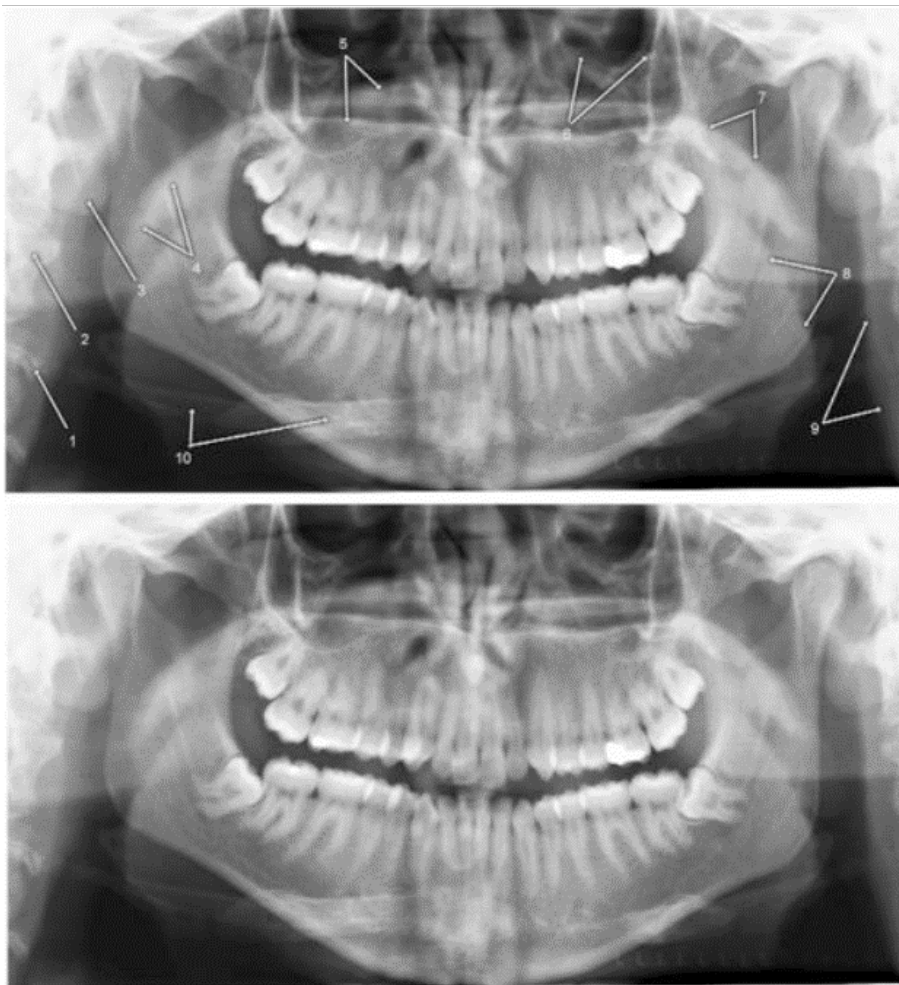
IG. 9-42 Genial tubercles (*arrow*) on the lingual surface of the mandible in this cross-sectional mandibular occlusal view.





Mandibular bony anatomic structures on the panoramic image. The labeled (top) and unlabeled (bottom) images are duplicates of the same patient.

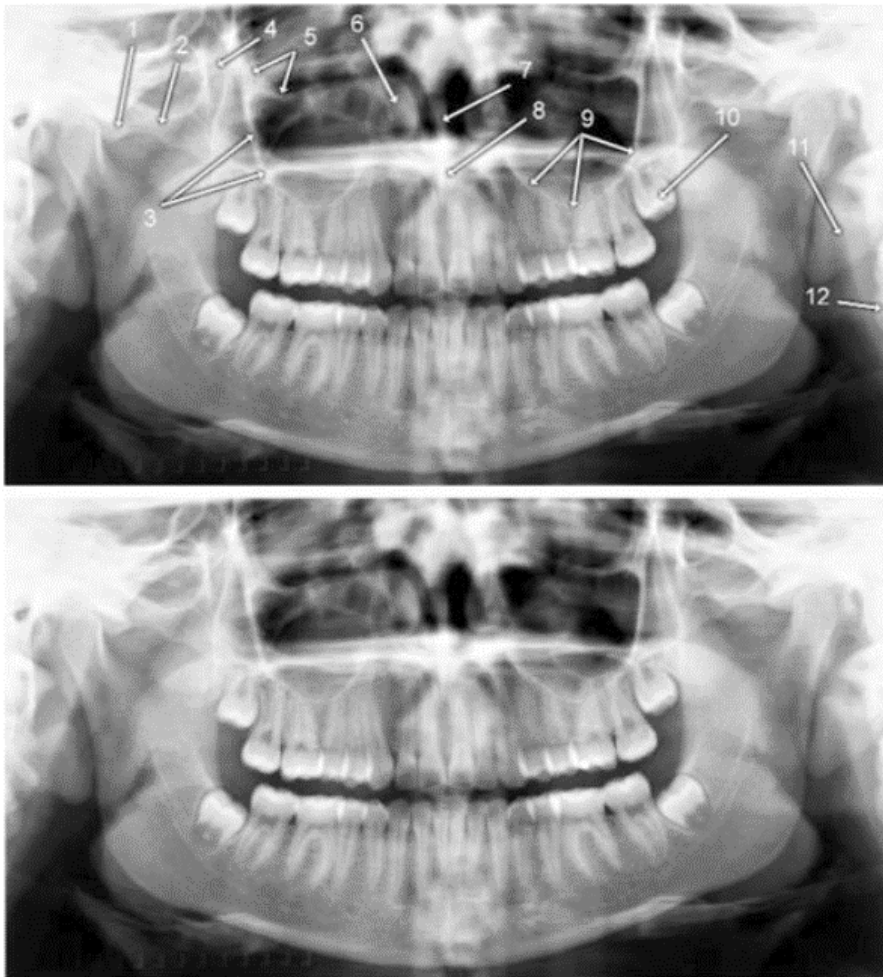
- 1. Mandibular condyle.**
- 2. Neck of mandibular condyle.**
- 3. Coronoid process of mandible.**
4. Ghost image—posterior aspect of inferior border of left side of mandible.
- 5. Inferior alveolar (mandibular) canal.**
6. Inferior border of mandible.
7. Superimposed shadow of cervical vertebrae.
- 8. Mental foramen.**
9. Submandibular fossa (lingual salivary gland depression)
10. Mandibular angle.
- 11. External oblique ridge.**
- 12. Sigmoid notch.**



Spinal, neck, and soft tissue anatomic structures on the panoramic image. The labeled (top) and unlabeled (bottom) images are duplicates of the same patient.

1. Schwall's node (variant of normal anatomy of the vertebral body).
2. Cervical vertebra.
3. Ear lobe.
4. Soft palate and uvula.
5. **Hard palate** (the lower line is the palatal surface; the upper line is the floor of the nasal cavity).
6. **Orbital rim.**
7. **Floor of nasopharynx** (upper surface of soft palate).
8. Posterior surface of tongue.
9. Posterior pharyngeal wall.
10. **Hyoid bone.**

(White, Stuart C.. Oral Radiology: Principles and Interpretation, 5th Edition. C.V. Mosby, 122003. 14.7.1.1).



Maxillary, or mid-facial, bony anatomic structures on the panoramic image. The labeled (top) and unlabeled (bottom) images are duplicates of the same patient.

1. Articular tubercle of the temporal bone (articular eminence of the temporomandibular joint).

2. Zygomatic arch.

3. Zygomatic process of the maxilla.

4. Pterygomaxillary fissure (see also Fig. 10-21).

5. Orbital rim.

6. Inferior nasal concha.

7. Nasal septum.

8. Anterior nasal spine.

9. Floor of the maxillary sinus.

10. Developing third molar.

11. Ear lobe.

12. Cervical vertebra.

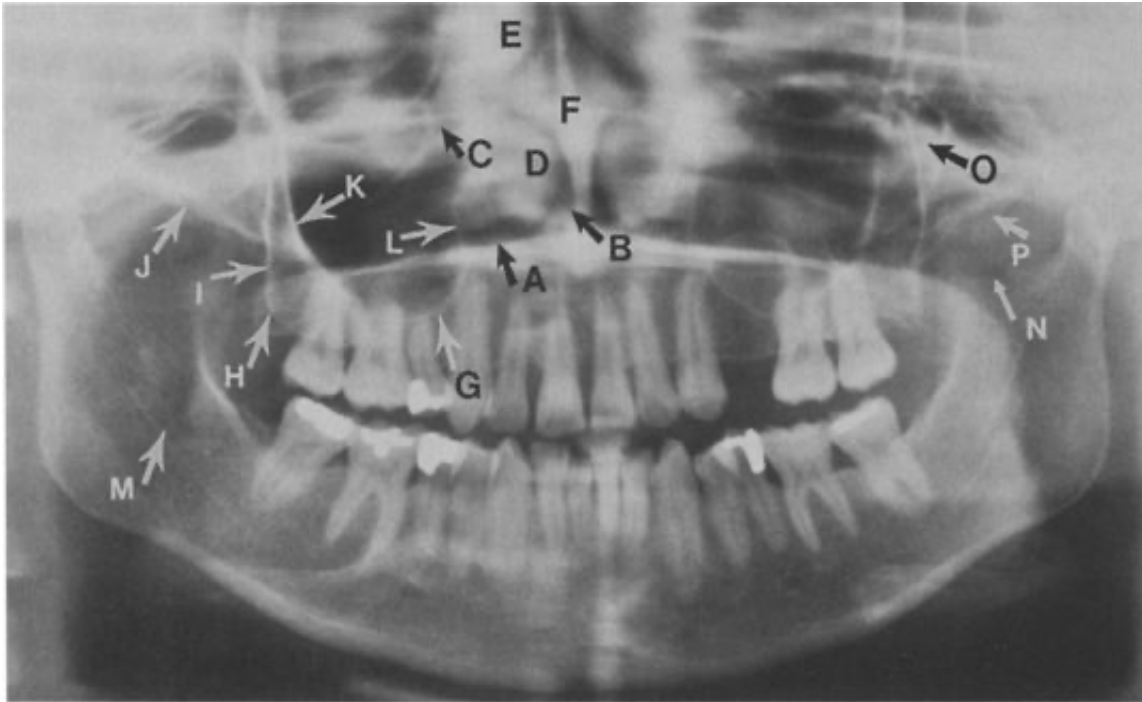


FIGURE 1-67

Identify the indicated structures.

- D*: soft tissue of inferior turbinate
- E*: soft tissue of middle turbinate
- F*: nasal septum
- G*: floor of maxillary sinus
- H*: maxillary tuberosity
- J*: inferior border of zygomatic arch
- K*: zygomatic process of maxilla
- L*: anterior wall of maxillary sinus
- M*: inferior alveolar canal
- P*: lateral pterygoid plate

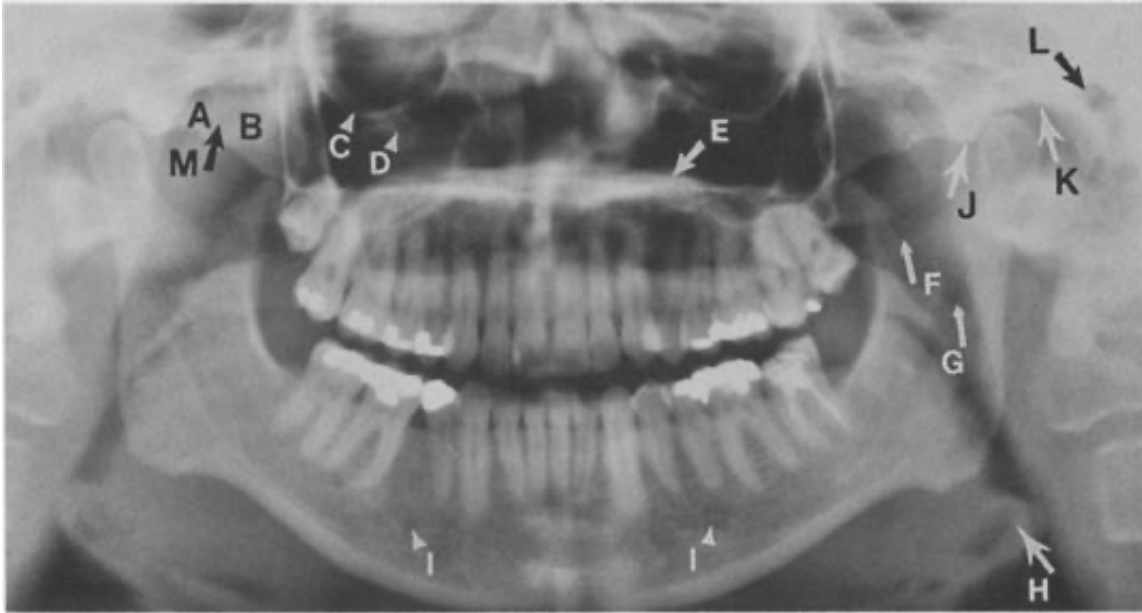


FIGURE 1-68

Identify the indicated structures.

G: mandibular foramen

K: glenoid fossa of TMJ (condylar fossa)