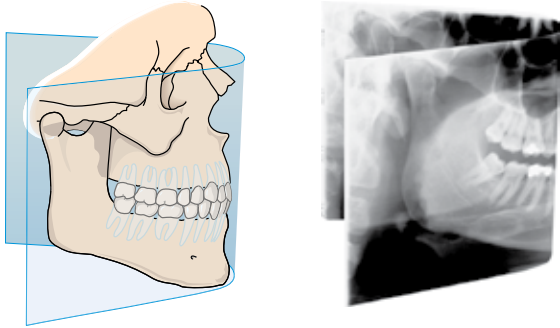


Why we wish viewing surfaces were curved...

A panoramic x-ray is the preferred way for a practitioner to diagnose those regions outside the viewing area of a full mouth series.

Panoramic imaging can cut procedure times by as much as 90% and reduces patient dose by nearly the same amount.



The magic of the panoramic image is the ability to take the curved anatomy of the maxillofacial region and display it in a flat format for viewing.

Too bad they don't make curved view boxes or computer monitors. It is easier to visualize the skull when keeping this in mind.

While anterior structures remain in the middle of the image, posterior midline structures are projected on both sides of the flat surface. In addition, many soft tissue shadows are projected throughout the image.



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35 Reasons

to go beyond a full mouth series



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Viewing Strategy for Anatomic Structures

not visible on a full mouth series

- 1 **Coronoid process of the mandible.** Begin at the right coronoid process. Examine for coronoid hyperplasia. Tip of coronoid should not be more than 1cm above superior border of zygomatic arch.
- 2 **Sigmoid notch.** Do not mistake a rarefied medial sigmoid depression for pathosis.
- 3 **Mandibular condyle.** Evaluate for erosions, emodeling, eburnation, subchondral cysts, osteophyte formation which may signal arthritis. Less commonly, erosions may be caused by neoplastic disease.

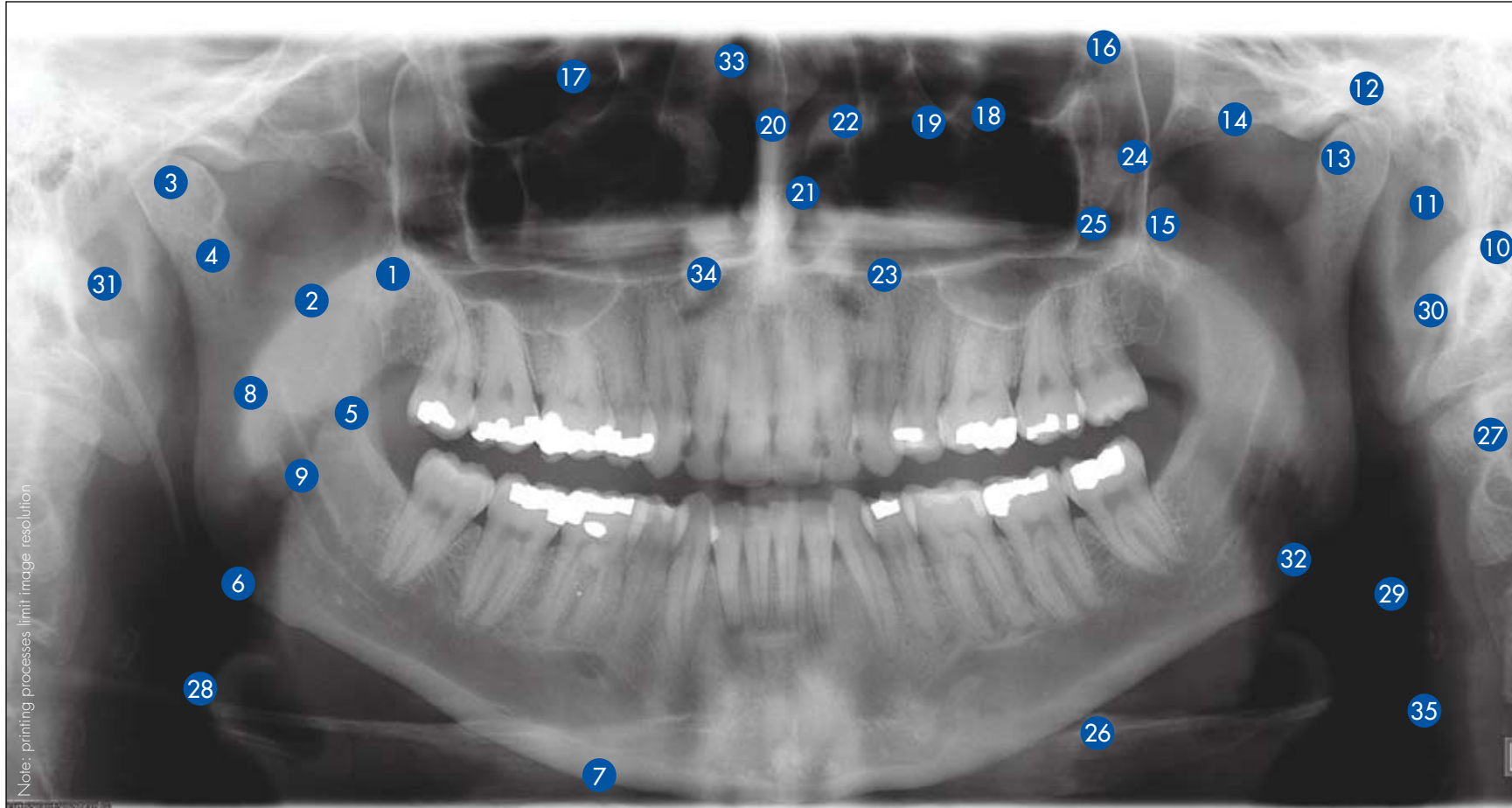
- 4 **Subcondylar region (condylar neck).** Evaluate.
- 5 **Ramus of the mandible.** Evaluate.
- 6 **Angle of the mandible.** Evaluate.
- 7 **Inferior border of the mandible.** Evaluate #4 - 7 for cortical integrity. Rule out fractures. Repeat steps 1 to 6 on the patient's left side.
- 8 **Lingula.** Evaluating the precise location in any individual patient assists in determination of where to give inferior alveolarnerve block.

- 9 **Inferior alveolar neurovascular bundle (mandibular canal).** Follow from lingula to mental foramen. In some patients the anterior extension which exits out the lingual foramen will be visible. Evaluate relationship of impacted teeth to the canal. Evaluate general bone quality and check for focal osseous defects.
- 10 **Mastoid process.** Evaluate structures on the left side of the maxilla first.
- 11 **External auditory meatus.** Evaluate.

- 12 **Glenoid fossa (temporal component of the TMJ).** Check for erosions, sclerosis, and other signs of arthritis.
- 13 **Articular eminence.** Look for zygomatic air cell defect (ZACD).
- 14 **Zygomatic arch.** Do not mistake a wide zygomatico-temporal suture for a fracture. May also contain ZACD in the posterior half of the arch.
- 15 **Pterygoid plates.** Evaluate.
- 16 **Pterygomaxillary fissure.** Check for cortical integrity to rule out neoplasia.

- 24 **Posterolateral wall of the maxillary sinus.** Evaluate the integrity of the sinus walls to rule out developmental, inflammatory, traumatic or neoplastic processes. Examine the content of the sinus for the degree of pneumatization. Check for antral pseudocysts, chronic mucosal hypertrophy, polyposis mucocele or neoplasia.
- 25 **Malar process.** Repeat steps 10 to 25 on the right side of the patient.
- 26 **Hyoid bone.** Evaluate.

- 17 **Orbit.** Evaluate.
- 18 **Inferior orbital rim.** Check for cortical integrity to rule out fracture.
- 19 **Infraorbital canal.** The infra-orbital foramen should not be viewed if the patient was properly positioned.
- 20 **Nasal septum.** Evaluate for septal deviation or perforation. Evaluate the nasal fossa for polyps.
- 21 **Inferior turbinate/soft tissue concha covering.** Evaluate.
- 22 **Medial wall of the maxillary sinus.** Evaluate.
- 23 **Inferior border of the maxillary sinus.** Evaluate.
- 27 **Cervical vertebrae 1 - 4.** Observe for osteophyte formation, loose bodies or other evidence of osteoarthritis. Remember the circular radiolucency in C2 is the transverse foramen.
- 28 **Epiglottis.** Evaluate.
- 29 **Soft tissues of the neck.** Evaluate for a wide range of soft tissue calcifications.
- 30 **Auricle (earlobe).** Evaluate.
- 31 **Styloid process.** If elongated /calcified stylohyoid ligament, rule out Eagle's syndrome.
- 32 **Oropharyngeal airspace.** Evaluate.
- 33 **Nasal air.** Evaluate.
- 34 **Bone of the maxilla.** Evaluate.
- 35 **Carotid artery.** Check for calcification.



Note: printing processes limit image resolution

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