

Fellowship Examination Blueprint: Oral and Maxillofacial Radiology

Blueprint

Competency Domain	Percentage
1. Diagnostic Images and Imaging Modalities	5 – 15%
2. Pertinent Radiological Observations	30 – 40%
3. Interpretation of Imaging Findings and Diagnosis	30 – 40%
4. Recommendations for Case Management	15 – 25%

Number of Cases	
Written	4
Oral	8

Competencies

1. Diagnostic Images and Imaging Modalities

- 1.1 Prescribe appropriate imaging for the patient's needs.
- 1.2 Recognize patient-specific contraindications for different imaging modalities.
- 1.3 Create diagnostic imaging protocols.
- 1.4 Identify the following diagnostic images:
 - 1.4.1 Two-dimensional imaging
 - 1.4.2 Cone beam computed tomography
 - 1.4.3 Multi-detector computed tomography (MDCT)
 - 1.4.4 Magnetic resonance imaging
 - 1.4.5 Nuclear medicine
 - 1.4.6 Ultrasound
- 1.5 Account for limitations of imaging modality or suboptimal image quality when interpreting images.
- 1.6 Describe the physics principles used to acquire diagnostic images.
- 1.7 Explain the biological effects of radiation.
- 1.8 Describe the role of digital enhancement tools in diagnostic imaging and interpretation.

2. Pertinent Radiological Observations

- 2.1 Identify and describe the function of anatomical structures of the head and neck, including, but not limited to:
 - 2.1.1 Osseous and soft tissues
 - 2.1.2 Blood supply, innervation, and lymphatics
 - 2.1.3 Anatomical spaces and communications
- 2.2 Identify normal anatomical variants, their clinical significance, and relationships between anatomical structures and spaces of the head and neck.
- 2.3 Recognize the imaging appearances of diseases and conditions involving the maxillofacial region.
- 2.4 Detect and describe significant findings from diagnostic imaging.

3. Interpretation of Imaging Findings and Diagnosis

- 3.1 Establish a diagnosis or a differential diagnosis based on observed imaging findings and relevant clinical information. This includes identifying and distinguishing among the following:
 - 3.1.1 Normal anatomic variants
 - 3.1.2 Developmental diseases and syndromes
 - 3.1.2.1 Hereditary
 - 3.1.2.2 Congenital
 - 3.1.3 Acquired disorders
 - 3.1.3.1 Trauma
 - 3.1.3.2 Infection /inflammatory
 - 3.1.3.3 Cyst and pseudocysts
 - 3.1.3.4 Benign neoplasms
 - 3.1.3.5 Malignant neoplasms
 - 3.1.3.6 Fibro–osseous lesion
 - 3.1.3.7 Metabolic and systemic diseases
 - 3.1.3.8 Arthritides
- 3.2 Provide a clear, concise, and comprehensive summary of the imaging findings.
- 3.3 Identify urgent or clinically significant findings and communicate them to the referring clinician(s).
- 3.4 Correlate clinical information and medical history with imaging features.
- 3.5 Correlate histopathologic findings with imaging findings.
- 3.6 Correlate the etiology and pathogenesis of diseases and conditions with imaging features involving the maxillofacial region.



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4. Recommendations for Case Management

- 4.1 Describe the management of diseases and conditions in the maxillofacial region identified with imaging features.
- 4.2 Describe the prognosis for diseases and conditions in the maxillofacial region identified with imaging features.
- 4.3 Provide recommendations for other diagnostic investigations and patient management.