



# Respiratory System

## Case 1:

A 35-year-old patient presents with complaints of facial pain, particularly in the region of the cheeks and upper teeth. The pain worsens when bending forward and is accompanied by nasal congestion and discharge. Examination reveals tenderness over the maxillary sinuses. Which of the following is the most likely diagnosis?

- a) Frontal sinusitis
- b) Ethmoid sinusitis
- c) Sphenoid sinusitis
- d) Maxillary sinusitis

## Case 2:

A 25-year-old patient complains of headache localized to the forehead, which worsens with pressure in the region. The pain is not associated with nasal congestion or discharge. On examination, there is tenderness over the frontal region. Which of the following sinuses is most likely affected?

- a) Maxillary sinus
- b) Ethmoid sinus
- c) Frontal sinus
- d) Sphenoid sinus

## Multiple Choice Questions (MCQs):

1. Which bone forms the posterior part of the nasal septum?

- a) Vomer
- b) Ethmoid
- c) Maxilla
- d) Palatine

2. Which of the following nerves supplies the skin of the external nose?

- a) Olfactory nerve
- b) Trigeminal nerve
- c) Facial nerve
- d) Optic nerve

3. The superior meatus receives the opening of which sinus?

- a) Maxillary sinus
- b) Frontal sinus
- c) Ethmoid sinus
- d) Sphenoidal sinus

4. Which part of the nasal cavity contains the openings of the paranasal sinuses?

- a) Vestibule
- b) Middle meatus
- c) Inferior meatus
- d) Spheno-ethmoidal recess

5. Which artery supplies the antero-superior part of the nasal cavity?

- a) Anterior ethmoidal artery
- b) Posterior ethmoidal artery
- c) Sphenopalatine artery
- d) Greater palatine artery



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6. The maxillary sinus drains into which nasal meatus?
- Superior meatus
  - Middle meatus
  - Inferior meatus
  - Nasopharyngeal meatus
7. Which of the following sinuses is located within the body of the maxilla?
- Frontal sinus
  - Sphenoidal sinus
  - Ethmoidal sinus
  - Maxillary sinus
8. The floor of the nasal cavity is formed by which structure?
- Nasal bone
  - Maxilla
  - Ethmoid bone
  - Palatine bone
9. Which sinus is located between the nasal cavity and the orbit?
- Frontal sinus
  - Maxillary sinus
  - Ethmoidal sinus
  - Sphenoidal sinus
10. Which nerve supplies the frontal sinus?
- Supraorbital nerve
  - Infraorbital nerve
  - Nasopalatine nerve
  - Greater palatine nerve
11. What is the function of paranasal sinuses?
- Smell perception
  - Sound amplification
  - Lighten the skull weight
  - Increase blood circulation
12. Which sinus is associated with the pituitary gland and optic chiasma?
- Frontal sinus
  - Maxillary sinus
  - Ethmoidal sinus
  - Sphenoidal sinus
13. The lateral wall of the nasal cavity is divided into how many parts?
- One
  - Two
  - Three
  - Four
14. Which part of the nasal cavity contains hair and is covered by skin?
- Vestibule
  - Atrium of the middle meatus
  - Nasal conchae
  - Spheno-ethmoidal recess
15. Which part of the nasal cavity receives the opening of the nasolacrimal duct?
- Superior meatus
  - Middle meatus
  - Inferior meatus
  - Spheno-ethmoidal recess



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Key answers

Medical Cases :

1. d) Maxillary sinusitis
2. c) Frontal sinus

MCQs:

1. a) Vomer
2. b) Trigeminal nerve
3. c) Ethmoid sinus
4. b) Middle meatus
5. c) Sphenopalatine artery
6. c) Inferior meatus
7. d) Maxillary sinus
8. b) Maxilla
9. c) Ethmoidal sinus
10. a) Supraorbital nerve
11. c) Lighten the skull weight
12. d) Sphenoidal sinus
13. c) Three
14. a) Vestibule
15. c) Inferior meatus