

The nose

Questions

1. With regard to epistaxis (bleeding from the nose), which of the following statements are true?
 - a It is most commonly idiopathic in origin.
 - b It is most common in children and middle-aged people.
 - c It commonly originates from Little's area in the posterior aspect of the nasal septum.
 - d After the nose has been packed, anterior septal bleeds can be cauterised using a silver nitrate stick.
 - e It can be a cause of severe shock.

2. The following are symptoms of allergic rhinitis:
 - a Sneezing.
 - b Epistaxis.
 - c Rhinorrhoea.
 - d Cough.
 - e A blocked nose.

3. Management of allergic rhinitis may involve the following:
 - a Use of antihistamine medication.
 - b Nasal decongestants.
 - c Removal of allergens.
 - d Surgical ligation of the olfactory nerve.
 - e Desensitisation therapy.

4. Common allergens in allergic rhinitis include the following:
 - a Pollen.
 - b Cat.
 - c Nuts.
 - d Plastic.
 - e Dust mite.

5. Regarding allergic rhinitis, which of the following statements are true?
 - a It is synonymous with intrinsic rhinitis.
 - b Continuous use of nasal decongestant therapy may cause rhinitis medicamentosa.
 - c It is a type 1 hypersensitivity reaction.
 - d It is an IgA-mediated reaction.
 - e It is not linked to atopic conditions.

6. Nasal polyps may present with the following symptoms:
 - a Chronic sinusitis.
 - b Increasing nasal obstruction.
 - c A neck lump.
 - d Hypersalivation.
 - e Rhinorrhoea.

7. The following are possible causes of nasal polyps:
 - a Chronic sinusitis.
 - b Rhinitis.
 - c Bronchiectasis.
 - d Bowel cancer.
 - e Cystic fibrosis.

8. Management options for nasal polyps include the following:
 - a Continuous high-level sympathomimetic nasal decongestants.
 - b Radiotherapy.
 - c Chemotherapy.
 - d Nasal steroids.
 - e Surgical removal.

9. Regarding a foreign body in the nose, which of the following statements are true?
 - a If several unsuccessful attempts have been made to remove the foreign body, the examiner must persevere.
 - b An inorganic foreign body will disintegrate over time, and requires no further treatment.
 - c A foreign body may present with nasal discharge.
 - d Foreign bodies in the nose are more common in the elderly.
 - e They are more common in Asians.

10. Viruses that may cause the common cold include the following:
 - a Rhinovirus.
 - b *E. coli*.
 - c Adenovirus.
 - d Epstein–Barr virus.
 - e Human papillomavirus.

11. The following may be symptoms of the common cold:
 - a Rhinorrhoea.
 - b Diarrhoea.
 - c Sneezing.
 - d Haematemesis.
 - e Nasal congestion.

12. The following may be involved in management of the common cold:
 - a Topical decongestants.
 - b Steam inhalation.
 - c Vigorous activity to ‘shake it off.’
 - d Paracetamol for mild fever or joint pain.
 - e Antibiotics.

13. In a patient who presents with sinusitis, the following symptoms indicate a potentially serious complication:
 - a Periorbital swelling or redness.
 - b Sudden abnormal behaviour or change in personality.
 - c Severe headache.
 - d Rhinorrhoea.
 - e Cranial nerve palsies.

14. The following granulomatous diseases affect the nose:
 - a Syphilis.
 - b Systemic lupus erythematosus (SLE).
 - c Wegener’s granulomatosis.
 - d Osteoarthritis.
 - e Sarcoidosis.

15. The following may be causes of nasal septal perforation:
- Recurrent nasal cocaine use.
 - Trauma.
 - Sneezing.
 - Intravenous injection of heroin.
 - Syphilis.
16. The following are causes of nasal septal deviation:
- Vocal cord polyp.
 - Congenital.
 - Chronic cough.
 - Recurrent sneezing.
 - Trauma.
17. Regarding antrochoanal polyps, the following statements are true:
- They appear similar to nasal polyps.
 - They arise from within the nose.
 - They usually appear unilaterally, in one nostril only.
 - They can be treated with steroid nasal sprays.
 - They require surgical intervention.
18. Regarding periorbital cellulitis, the following statements are true:
- It may be a complication of ethmoidal sinusitis.
 - Input from an ophthalmologist should be sought.
 - It may follow an upper respiratory tract infection.
 - It requires intravenous broad-spectrum antibiotics.
 - It may present with pain around the eye.
19. A man presents to A&E with cheek swelling. As the first person to see him, you should keep the following diagnoses in mind:
- Facial bone fracture.
 - Severe dental decay.
 - Sinus malignancy.
 - Zenker's diverticulum.
 - Tympanic membrane perforation.

20. A 26-year-old man sustained a nasal fracture 12 days ago during a pub fight. He has come into theatre today for nasal manipulation to straighten his nose under general anaesthetic. You have been asked to take consent from him for the procedure. Which of the following statements are true?
- He has come too late and nothing can be done so long after the initial trauma.
 - The nose may not be restored to its previous appearance.
 - The procedure will cure any accompanying septal deviation.
 - He may require an external splint.
 - The procedure may result in bleeding.
21. A young man has come in for his scheduled adenoidectomy. You have been asked to consent him. The following are possible complications of which he should be made aware:
- Once removed, the adenoid tissue may re-grow, but not to the symptomatic size.
 - He will experience recurrent lower respiratory tract infections.
 - He may experience excessive bleeding.
 - The procedure is performed through the mouth, so he will have no visible scars.
 - He may have some nasopharyngeal regurgitation.
22. A young man has come to see you to discuss the management of his septal deviation, which is causing nasal obstruction. Regarding septoplasty, which of the following statements are true?
- Septal perforation may occur.
 - Septal haematoma may occur.
 - It may not cure his symptoms.
 - Acute nasal obstruction may occur.
 - Bleeding can occur.
23. Wegener's granulomatosis refers to a triad that includes the following features:
- Glomerulonephritis.
 - Bowel cancer.
 - Respiratory tract granulomas.
 - Osteoporosis.
 - Vasculitis.

24. The following symptoms or signs will raise the suspicion of a cancer of the maxillary antrum:
- Change in bowel habit.
 - Palpitations.
 - Unilateral nasal obstruction.
 - Back pain.
 - Bloody nasal discharge.
25. A patient presents to you in A&E following a fight earlier in the evening. Which of the following statements about septal haematoma are true?
- It usually occurs after trauma to the nose.
 - It may become infected and cause a septal abscess.
 - It should be left alone as it will resolve spontaneously.
 - If left untreated it could cause a saddle nose.
 - It may cause a nasal obstruction.
26. The following are possible causes of anosmia:
- Nasal polyps.
 - Acute otitis media.
 - Nasal cocaine use.
 - Parotid gland cancer.
 - Olfactory bulb tumours.
27. A 32-year-old man attends A&E following a fight. He complains of anosmia and a unilateral transparent watery nasal discharge. You have been asked to see him, and you note a multitude of traumatic bruises on his face and body. Which of the following statements are true about this patient?
- He is suffering from incidental rhinorrhoea.
 - The discharge is due to a nasal polyp.
 - He has a fracture in the region of the pterion.
 - He is leaking cerebrospinal fluid.
 - He has a fracture of the anterior fossa/cribriform plate.
28. Acute bacterial sinusitis may be caused by the following:
- Moraxella catarrhalis*.
 - Adenovirus.
 - Streptococcus pneumoniae*.
 - E. coli*.
 - Haemophilus influenzae*.

29. During a ward round, the consultant explains to you that the patient you are seeing has chronic inflammatory sinusitis. He asks you to name the triad of conditions for this diagnosis. The following are part of the triad:
- Nasal polyps.
 - Diarrhoea.
 - NSAID sensitivity.
 - Asthma.
 - Septic arthritis.
30. A patient with cystic fibrosis comes to see you about his sinusitis. The following statements about this patient are true:
- Thick mucus production is responsible for sinusitis.
 - He is more likely to have HIV.
 - Nasal polyps may also contribute to sinusitis.
 - Mucolytics may be used.
 - He is more likely to have *Pseudomonas aeruginosa* in his mucus.
31. The following pathogens may be isolated from an HIV patient with sinusitis:
- Mycobacterium.
 - Pneumocystis carinii*.
 - Human papillomavirus.
 - Epstein–Barr virus.
 - Pseudomonas* species.
32. The following viruses may cause rhinitis:
- Respiratory syncytial virus.
 - Staphylococcus aureus*.
 - Haemophilus influenzae*.
 - Human papillomavirus.
 - Rhinovirus.
33. The following are differential diagnoses for a patient presenting with rhinitis:
- Nasal polyps.
 - Urinary tract infection.
 - Allergic rhinitis.
 - Vasomotor rhinitis.
 - Infectious rhinitis.

34. Regarding the embryology of the nose, the following statements are true:
- a The nose partly develops from neural crest cells.
 - b The nose begins to develop by week 4 of gestation.
 - c The nose begins to develop by week 20 of gestation.
 - d The nasal conchi form at 4 weeks' gestation.
 - e The nasal placodes are of ectodermal origin.
35. The following may be features of acute sinusitis:
- a Facial pain that is worse on coughing.
 - b Vomiting.
 - c Pain around the maxillary region.
 - d Nasal obstruction.
 - e A recent upper respiratory tract infection.
36. Chronic rhinitis can result in turbinate hypertrophy, further exacerbating the nasal obstruction. The following techniques are used to treat turbinate hypertrophy:
- a Submucosal diathermy.
 - b Tonsillectomy.
 - c Myringectomy.
 - d Surgical turbinate trimming.
 - e Nasal septal perforation.
37. The following may be signs or symptoms of a retained nasal foreign body:
- a Unilateral nasal discharge.
 - b Facial pain.
 - c Difficulty breathing through the nose.
 - d Cataract formation.
 - e Chvostek's sign.
38. Regarding nasal septal haematoma, the following statements are true:
- a Nasal deformity occurs.
 - b The nasal septum may appear asymmetrical.
 - c The septal haematoma usually forms within 5 minutes of nasal trauma.
 - d A swelling may be felt inside the nose along the nasal septum.
 - e It should be left alone as it will resolve spontaneously.

39. The following may be complications of a septal haematoma:
- Saddle nose formation.
 - Septal perforation.
 - Dysphagia.
 - Septal abscess formation.
 - Ventricular fibrillation.
40. The following may be complications of sinusitis:
- Laryngeal cancer.
 - Periorbital sinusitis.
 - Dysuria.
 - Otosclerosis.
 - Frontal lobe abscess.
41. The following statements about epiphora are true:
- Epiphora is the term used to describe dry eyes.
 - It can be treated by eye drops.
 - Epiphora is the term used to describe excessive tear production.
 - It has a poor prognosis.
 - It may be treated by endoscopic dacryocystorhinostomy (DCR).
42. Which of the following statements about endoscopic dacryocystorhinostomy (DCR) in the treatment of epiphora are true?
- It involves making an incision along the length of the nose.
 - It results in a large facial scar.
 - It requires a hospital stay of 7–10 days after the procedure.
 - It is a day-case procedure.
 - It can be performed under spinal block anaesthesia.
43. Complications and problems of endoscopic dacryocystorhinostomy (DCR) in the treatment of epiphora include the following:
- A blocked nose.
 - Bleeding.
 - Coughing.
 - Anosmia.
 - Difficulty removing the drainage device.

44. Which of the following statements about the middle meatus within the nasal cavity are true?
- a The maxillary sinus drains into the middle meatus.
 - b The anterior ethmoid sinus drains into the middle meatus.
 - c The sphenoidal sinus drains into the middle meatus.
 - d The middle meatus contains the opening of the nasolacrimal duct.
 - e The posterior ethmoid sinus drains into the middle meatus.
45. Regarding the nasal conchae, which of the following statements are true?
- a There are four conchae.
 - b The conchae protrude from the nasal septum medially.
 - c There are two meatuses.
 - d They help to cool the inspired air.
 - e They help to dry the inspired air.
46. Which of the following statements about the sense of smell are true?
- a The sense of smell is mediated by the oculomotor nerve.
 - b Anosmia describes a heightened sense of smell.
 - c The sense of smell is mediated by the facial nerve.
 - d The sense of smell may be lost in cases of nasal congestion.
 - e Smell is detected via a G-protein cascade mechanism.
47. Which of the following statements about the histology of the nasal mucosa are true?
- a The superficial layer mainly consists of squamous cells.
 - b Goblet cells are present.
 - c Columnar cells are ciliated.
 - d It is composed of astrocytes.
 - e It has an abundant supply of blood in the lamina propria layer.
48. Regarding the neural innervation of the nose, which of the following statements are true?
- a Sensation to the skin overlying the nose is innervated by the trigeminal nerve.
 - b The nasal septum is innervated by the cochlear nerve.
 - c The optic nerve transmits the sense of smell.
 - d The olfactory nerve axons traverse the cribriform plate.
 - e The cribriform plate is formed from the ethmoid bone.

49. Factors that may exacerbate epistaxis include the following:
- Von Willebrand disease.
 - Warfarin.
 - Vitamin K deficiency.
 - Thalassaemia.
 - Haemophilia.
50. Regarding rhinoplasty, which of the following statements are true?
- It is synonymous with septoplasty.
 - It can be performed in order to improve function.
 - It refers to reconstruction of the ear.
 - It may result in periorbital bruising.
 - It can be performed for cosmetic reasons.
51. Which of the following statements about the nasal meatuses are true?
- The superior meatus is located between the nasal roof and the superior concha.
 - The frontal sinus drains into the superior meatus.
 - The nasolacrimal duct opens into the inferior meatus.
 - The inferior meatus is located between the middle and inferior conchae.
 - Tears from the lacrimal sac enter the superior meatus.
52. The following bacteria may be found in the normal nasal flora:
- Staphylococcus epidermidis*.
 - E. coli*.
 - Staphylococcus aureus*.
 - Haemophilus influenzae*.
 - Helicobacter pylori*.
53. The following bacteria found in the nasal flora can be pathogenic:
- Haemophilus influenzae*.
 - Chlamydia trachomatis*.
 - Staphylococcus epidermidis*.
 - Legionella pneumophila*.
 - Streptococcus pneumoniae*.

54. Regarding sinusitis in children, which of the following statements are true?
- a The sphenoid sinus is most affected.
 - b The child may have a fever.
 - c It is most commonly caused by *Helicobacter pylori*.
 - d It may be treated with antibiotics.
 - e It tends to present with vomiting.
55. With regard to nasal obstruction, which of the following statements are true?
- a The narrowest part of the nose is at the front.
 - b Deviated nasal septae can be present without any history of trauma.
 - c People with hayfever often complain of the blockage shifting from one side of the nose to the other at different times.
 - d Congenital obstruction of the posterior choani needs to be ruled out in a neonate with breathing difficulties.
 - e Adenoidal hypertrophy is a common cause in young children.