

ENT SSMS placement workbook & study guide

Due to the COVID 19 pandemic, the SSMS placement has undergone a significant restructuring. Such changes have been adopted to maximise your safety during the outbreak, whilst aiming to preserve a meaningful educational experience. During this transition period we anticipate a degree of variance in student experience which we are not accustomed to. To mitigate this, we have constructed this workbook, aiming to provide a reproducible, transparent placement.

Completion of the workbook is optional but provides reassurances to yourself that you have achieved all general expected activities and experience from an ENT placement. Upon request feedback can be provided on the activities included within.



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Tutorial checklist

Below is a list of common tutorials and teaching that we expect you will cover by the end of your ENT/SSMS placement. The timetabled sessions are available via the weekly ENT Kahoot! challenge on the website. The essential non timetabled sessions are tutorials that have been highlighted by prior students as being received ad hoc in clinics, theatres and on the wards. With reduced clinical activity, it is possible the latter may become self-directed learning.

Timetabled tutorials

Please complete the online Kahoot challenges.

- Epistaxis
- Facial palsy
- Rhinosinusitis and facial pain
- Neck lumps
- The sore throat

Essential non timetabled sessions

Often encountered ad hoc during previous placements. Digital versions can be found on the ENT Ed website and further session can be conducted upon request.

- History and examination
- Audiograms
- Tuning fork testing
- Vertigo
- Otological infections

BPPV sign off

During your placement you will be asked to demonstrate the Dix-Hallpike and Epley manoeuvre on your placement colleague. Please can you ensure you read up on the underpinning theory and view the online [video tutorials](#) prior.

This sign off session will be run by one of the ENT tutors.

If for some reason you were unable to achieve this sign off, please contact us to rearrange. Options to conduct this virtually exist upon request.



Virtual theatre

ENT surgery carries a particularly high risk of exposure to COVID-19, as it is focused in the aerodigestive tract. As such the risk benefit ratio is offset. However below is a link to some particularly valuable online videos. In order to view these please consider signing up to Medtube, a free medical video viewing website.

[Grommet insertion](#)

[Myringoplasty](#) (Repair of a tympanic membrane perforation)

[Nasal polypectomy](#) (Using a Diego instrument)

[Septoplasty](#)

[Laryngoscopy & bronchoscopy](#)

[Palatine tonsillectomy](#) (Coblation technique)

[Normal post tonsillectomy appearance](#)

Each of these procedures has a brief tutorial found on the [procedure section](#) of the ENT Ed website.

Optional digital zoom theatre session

For each group, an optional virtual theatre session is on offer for those interested. This will be conducted via zoom or in a socially distanced room. One or more of the tutors will talk through a number of surgical videos using a 3D anatomy app to orientate the corresponding anatomy. If interested contact [Chris Summers](#) to set this up.



Clinical case questions

We will endeavour to seek out clinical cases for you during your placement however in the event that there are no appropriate cases for you to take a history and examine we will ask you to take a theoretic history from one of the tutors. Additionally, we encourage you to complete the following worked cases to hone a focused ENT history.

Otology case

A 64-year-old lady presented to her GP with recurrent episodes of dizziness and poor balance. She has since been referred into ENT clinic where she is seen by yourself. You have been asked to investigate her balance issues further.

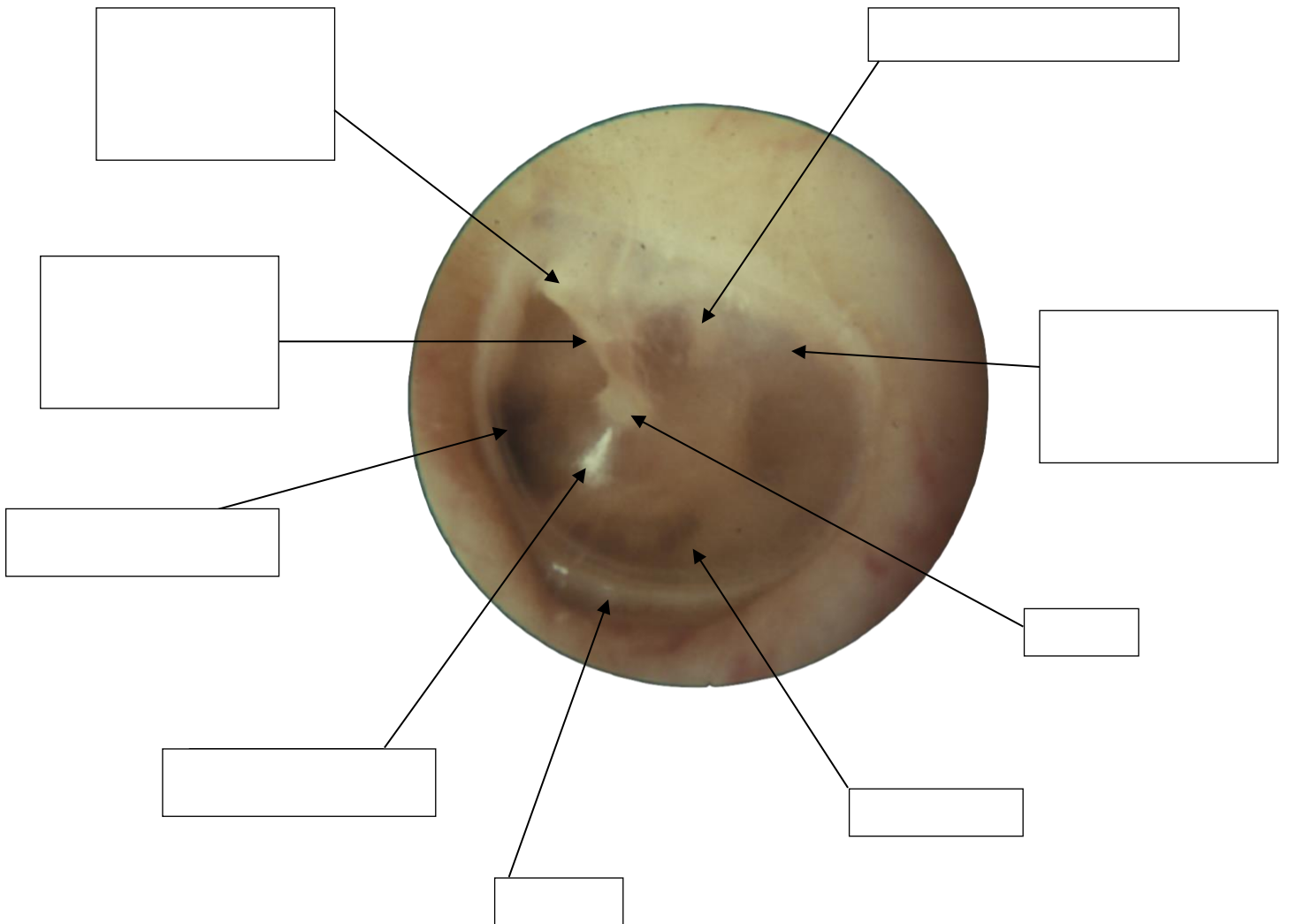
1. Which body systems can cause balance disturbances?
2. Which examination would you use to differentiate an ENT cause of vertigo from a central cause (e.g. stroke or TIA)?
3. After ruling out other causes, you believe this to be an ENT problem. When taking a history from the patient it is important to think about the timing of the vertigo and whether the attack has been triggered by anything.

The patient describes attacks of dizziness which last a few hours and make her want to lay still. These attacks are unpredictable and do not seem to be triggered by anything. She believes the hearing in her right ear is reduced during an attack concurrent with a humming noise and a feeling of fullness in the same ear.

Complete the following table;

Condition	Timing	Triggers	Associations
BPPV			
Meniere's disease			
Labyrinthitis			
Vestibular neuritis			

4. After taking a detailed history you would then need to examine the ear. Using an otoscope to visualise the tympanic membrane, you are confronted with the image below.



a. Is this the left ear or the right ear? Justify your answer

b. Label the image

c. Describe the tympanic membrane and visible auditory canal in the image above.

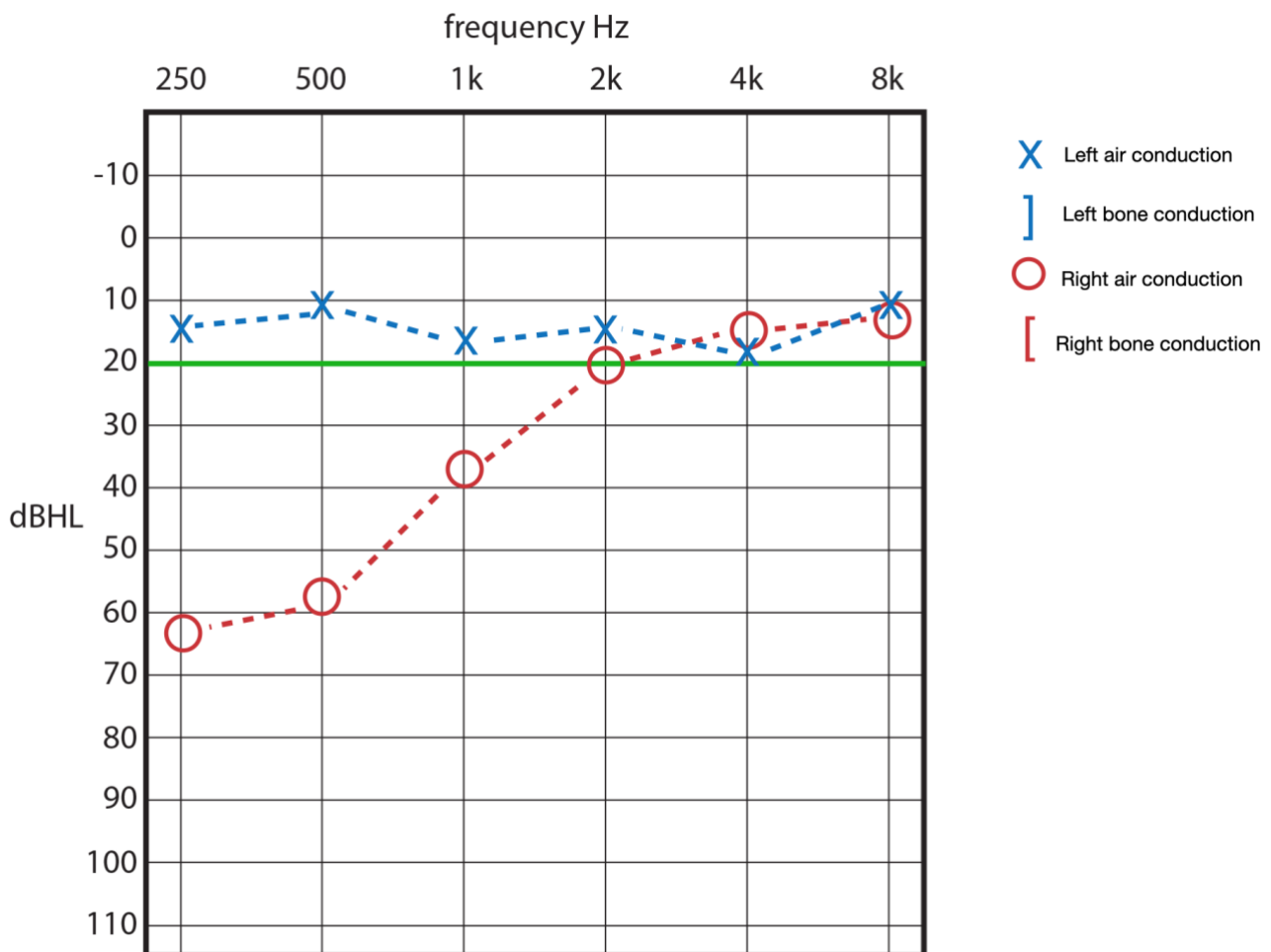
5. Next you undertake a bed side hearing assessment by performing Rinne's and Weber's tests.

In this patient, Rinne's is normal (positive) on both sides. Weber's lateralised to the left.

Describe what these tests suggest in this patient

6. Initially the GP wondered if this patient could be suffering with Benign Positional Paroxysmal Vertigo (BPPV). What is the most common diagnostic manoeuvre called?

7. Before the patient was seen in clinic, she had an audiogram performed shown below; Describe this audiogram.



8. Given this lady's history and examination findings, what do you think is the most likely diagnosis?

9. Give one feature of the hearing loss associated with this condition, that marks it out as unusual.

10. Although not the most likely diagnosis, which pathology would it be important to rule out given the audiogram? Which investigation would you organize and why?

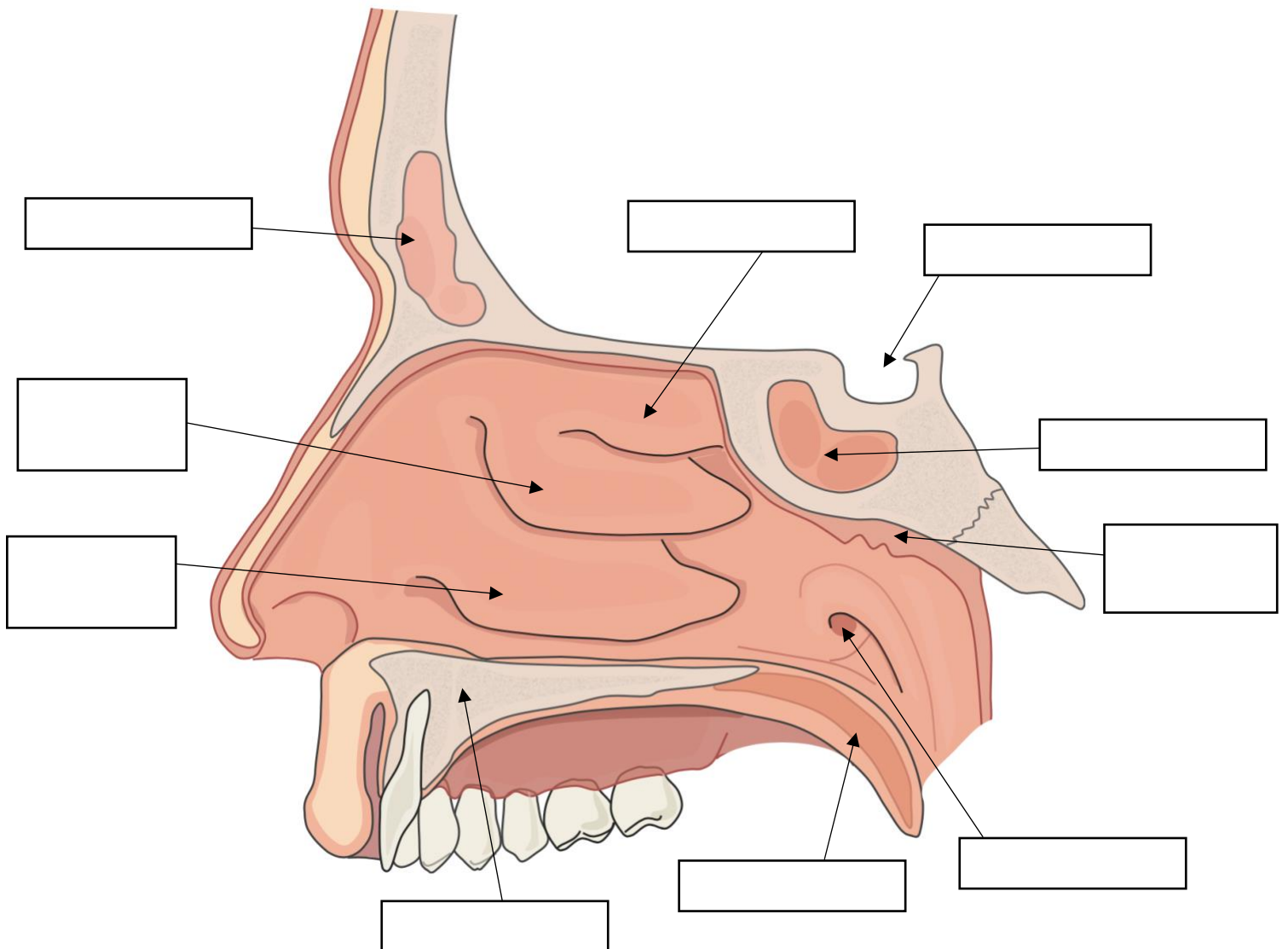
11. What treatment options would be available to this lady to treat the most likely diagnosis?

Rhinology case

A 47-year-old carpenter has been referred into the ENT clinic with a 6-month history of recurrent frontal headaches. He complains of a constant feeling of nasal blockage particularly in the left nostril. He also suffers from nasal discharge and a reduction in his sense of smell and taste.

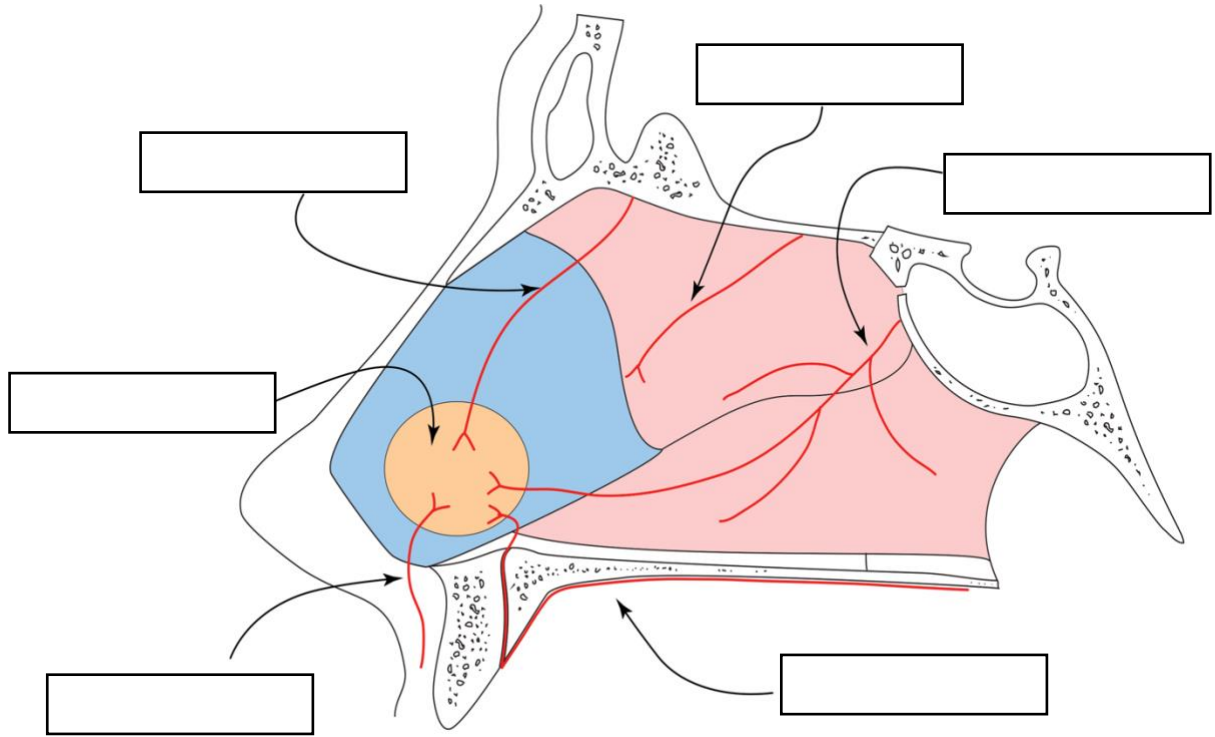
He is otherwise fit and well and takes no regular medication. His social history includes an alcohol intake of around 14 units of alcohol per week and he smokes around 1g of tobacco weekly.

1. The image below shows a parasagittal split of the nasal cavity. Add labels to the diagram.



2. During further questioning he states that he has been trying to blow his nose a lot and is now having recurrent nose bleeds. Consider the most likely areas for bleeding during epistaxis.

Name each vessel shown and then name and highlight the most common bleeding points for anterior bleeding.



3. Outline the management algorithm for epistaxis below.

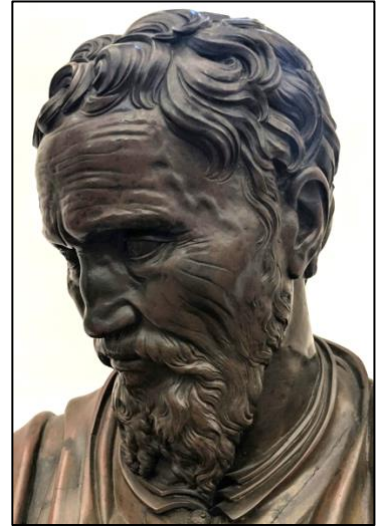
4. During examination of the external nose there are numerous clinical signs you may encounter. Name the clinical signs shown below. For each image list possible underlying causes. (Bonus point for the name of the person depicted in the statue C).



A



B

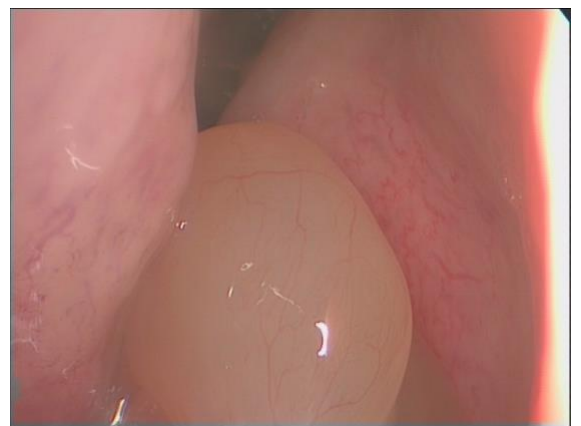


C

- A -
B -
C -

5. Your examination reveals none of the findings above. However, anterior rhinoscopy with a pen torch reveals the following appearance in the left side of the nasal cavity. The right side appears normal.

Describe the lesion in as much detail as possible.



6. During the clinic the clinician managing the case mentions nasal carcinoma is extremely rare, but this patient is at higher risk. What aspects of the history and examination informs this statement? List all risk factors for nasopharyngeal carcinoma.

7. In clinic the patient undergoes Fiberoptic Nasendoscopy (FNE) to visualize the nasal cavity in further detail. Although it appeared only unilateral polyps were visible on anterior rhinoscopy with a pen torch, in reality there were polyps on both sides'. Given all the information you have, what is the most likely diagnosis?

8. Formulate an in-depth management plan for this patient. Divide this into initial and secondary management.

9. You are on-call 2 months later and the same patient is referred in with acute facial pain, swelling and erythema surrounding his left eye. There is a full range of eye movements that are pain free. There is no evidence of proptosis and no change to the patient's visual acuity.

What is the likely diagnosis?

10. Numerous ophthalmic signs are discussed above. Which sign/ symptom, is suggestive of possible optic nerve compression?

Laryngology case

A 72-year-old retired farmer presents to primary care with dysphonia, dysphagia and left sided otalgia. You take a history and enquire how long the patient has suffered with these symptoms.

1. What duration of symptoms would warrant the case be referred to ENT as an Urgent Suspected Cancer (USC)?

On further questioning, other than the pain, no otological symptoms are present. Examination of the ears is normal bilaterally.

As such, you are suspicious this pain is a referred otalgia.

2. Which 7 areas that can refer pain to the ear?

Location	Underlying pathology
T	
T	
T	
T	
T	
T	

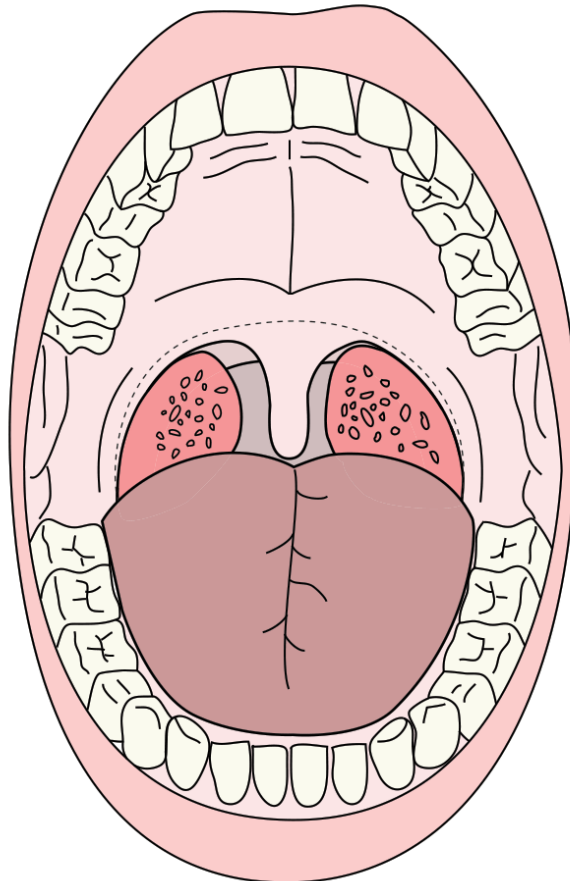
You conduct a thorough examination of the head and neck region and discover a small indurated non-healing ulcer on the left lateral border of the tongue. There also several small firm neck lumps on the left side of the neck.

3. You are suspicious that the ulcer represents a neoplasm. What risk factors are associated with carcinomas of tongue? (*Clue, there are 5 or more beginning with the letter S.*)

4. What investigation(s) should be requested for this patient?

5. Label the diagram below. Be sure to include the following labels;

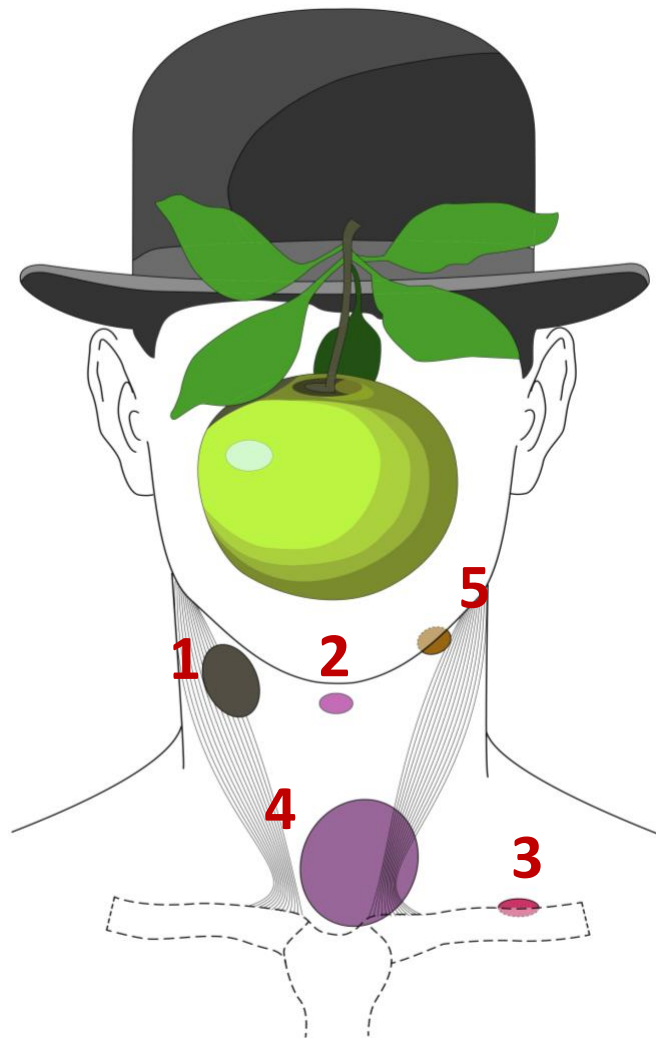
- Anterior faucial pillar (Palatoglossus)
- Posterior faucial pillar (Palatopharyngeus)
- Palatine tonsils
- The area medico-colloquially referred to as 'coffin corner'
- Soft palate
- Hard palate, palatal rugae & raphe



Make sure you can identify each of these structures in the mirror. Also ensure that you can locate;

- The parotid or Stensen's ducts (near 2nd upper molar)
- The submandibular or Wharton's ducts
- The lingual frenulum

6. For each of the neck lumps labelled below write a differential diagnosis.



1 -

2 -

3 -

4 -

5 -

1-5

Paediatric cases (MCQs)

1. A 3-year-old child is referred into the ENT clinic with 2-month history of offensive smelling unilateral nasal discharge.

Which diagnosis is most likely?

- a) Adenoidal hypertrophy
- b) Foreign body
- c) Nasopharyngeal carcinoma
- d) Antrochoanal polyp

Use the space below to justify and discuss this choice?

2. A 2-year-old presents with a 1-day history of right sided otalgia. There has been no otorrhea or pyrexia. Despite occasionally pulling at the ear and being teary the child maintains a good oral intake.

Otoscopy reveals the following appearance.



Which diagnosis is most likely?

- a) Acute otitis externa
- b) Acute otitis media
- c) Chronic otitis media
- d) Glue ear
- e) Cholesteatoma

What is the initial management?

- a) Analgesia, reassurance, safety netting
- b) IV antibiotics
- c) Myringotomy & grommet insertion
- d) PO antibiotics

3. A 13-year-old girl presents with a 4-day history of an acute sore throat, unable to eat or drink and a pyrexia of 40°C. She has no cough.

On examination she has exudate covered palatine tonsils. There is no trismus but there are multiple bilateral soft level 2 lymph nodes.

Which pathogen is most likely?

- a) Bacterial
- b) Fungal
- c) Viral

Which scoring system (mnemonic) can guide this diagnosis? Score the patient in this case.

- a) Beighton score
- b) CENTOR score
- c) CHADS₂ score
- d) CURB 65 score
- e) MONA score

How would you manage this case? Justify this choice.

4. A 5-year-old boy suffers with a 1-year history of recurrent left sided epistaxis that stops with simple first aid.

There is no family history of coagulation disorders.

PMH: Nil

Drug history: Nil

Allergy to peanuts

Which option from the list below is the best initial management?

- a) 2-week course of Naseptin cream
- b) 2-week course of Bactroban cream
- c) Nasal cautery under general anaesthetic
- d) Nasal cautery under local anaesthetic
- e) Nasal packing

Virtual patients

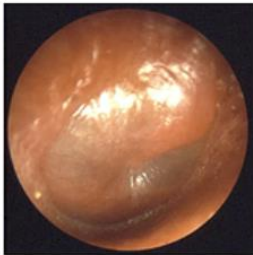
More worked cases are available on our [virtual patients](#) section of the website.

Puzzles and quizzes

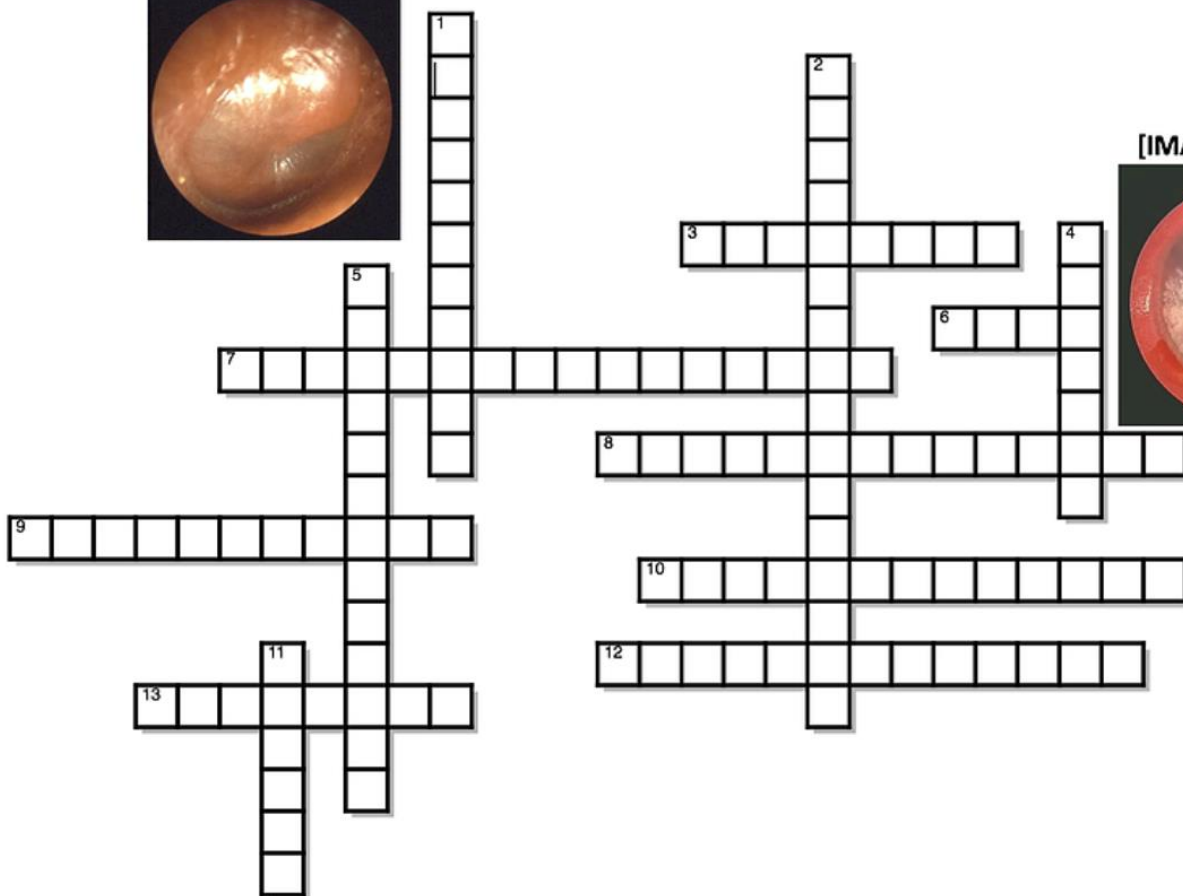
Have some time to kill on the bus or during your lunch hour? Try one of our puzzles or quizzes below.

Otological infections crossword

[IMAGE 1] 2 DOWN



[IMAGE 2] 7 across



ACROSS

3. A merocel insert used as an adjunct to treat otitis externa in the presence of significant canal stenosis (4, 4)
6. The area from which epithelial cells migrate on the tympanic membrane (4)
7. A chalky deposit, of no clinical relevance, that is sometimes found in the tympanic membranes of patients who have suffered with recurrent tympanic perforations (**Image 2**) (16)
8. A complication of acute otitis media causing a fluctuant erythematous swelling in the post auricular area (7, 7)
9. A complication of a middle ear infection that can be graded by the House-Brackmann scale (6, 5)
10. A slight misnomer of a condition, whose ancient Greek/Latin name would have you believe it was a fatty tumour (13)
12. An infective ENT condition associated with vertigo (that lasts days to weeks), nausea, vomiting, tinnitus & hearing loss (13)
13. A small localised abscess in the ear canal (8)

DOWN

1. The name of the gram-negative bacteria commonly found in immune compromised patients suffering with Malignant otitis externa (11)
2. Spot diagnosis for **Image 1** (5, 6, 5)
4. A Teflon insert that can be used to surgically treat glue ear (7)
5. The only topical antibiotic scientifically proven not to cause ototoxicity (13)
11. The likely causative pathogen resulting in a scanty creamy white otorrhoea. Also referred to as "wet newspaper" (6)

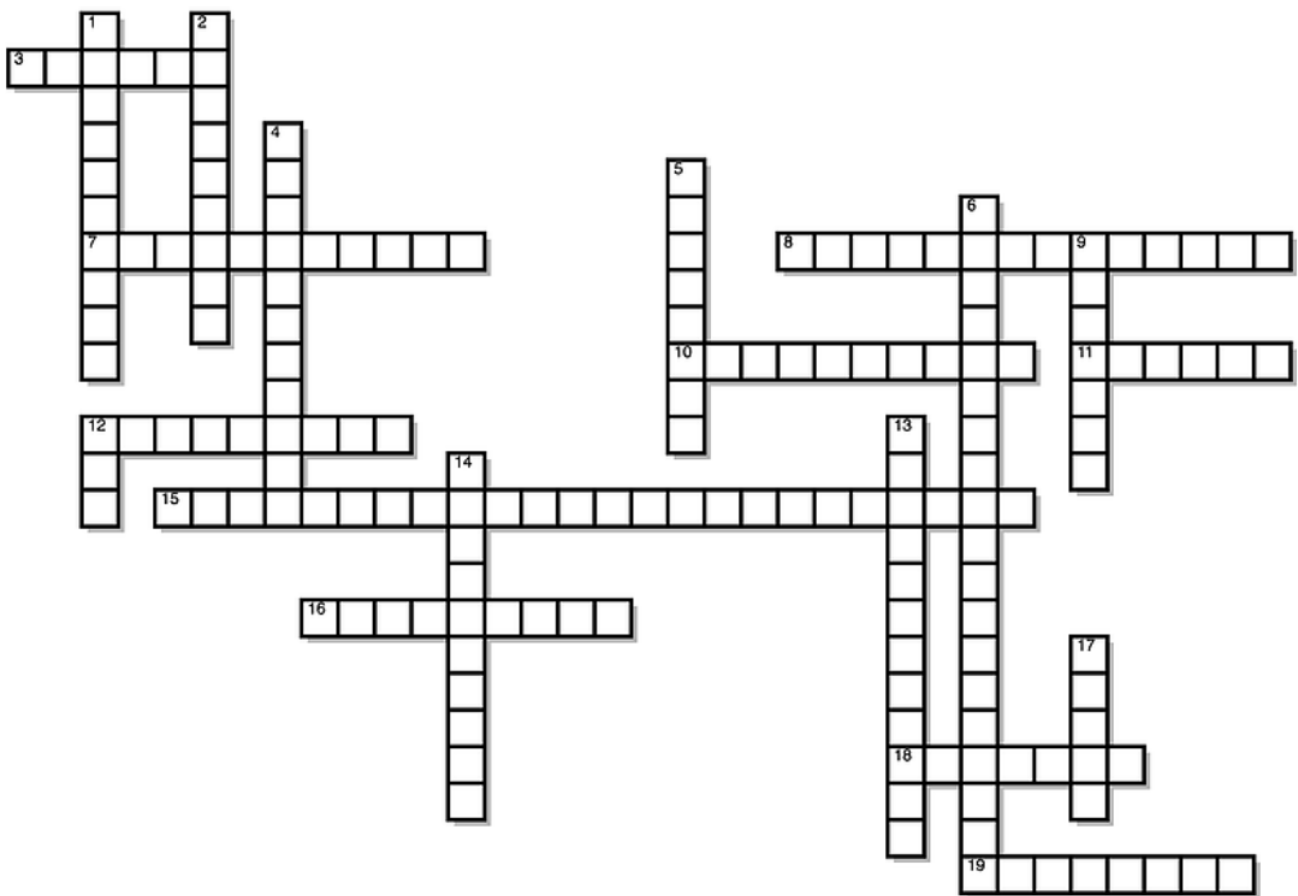
Epistaxis wordsearch



More than just a simple wordsearch. Work out the answers to the questions below then find the corresponding words in above.

1. Name of the location of 90% of epistaxis
2. A genetic disorder that forms AV malformations in the skin, lungs, brain etc
3. Name of posterior vascular plexus in the nasal cavity causing posterior epistaxis
4. 1st line treatment for all epistaxis
5. The common brand name for anterior nasal packing
6. Chemical used in cautery sticks
7. Physically scaring complication of posterior nasal packing with foleys catheter

Laryngology crossword



ACROSS

- 3 A complication of tonsillitis that is associated with a hot potato voice (6)
- 7 The name given to a painful swallow (11)
- 8 Condition associated with pyrexia, sore throat, chronic fatigue and hepatosplenomegaly (9,5)
- 10 The most sensitive 1st line treatment for a neck lump (10)
- 11 Percentage of parotid tumours that are benign (6)
- 12 The scientific name for bad breath, a symptom associated with oral cancers (9)
- 15 The medical term for croup (24)
- 16 A ring of tissue made up by the adenoids, the palatine and lingual tonsils (9)
- 18 The term used for reduced mouth opening secondary to masseteric spasm (7)
- 19 The name of the parotid duct seen opposite the second upper molar tooth (8)

DOWN

- 1 A boiled sweet used to encourage salivation in patients with salivary calculi (10)
- 2 The medical term used to describe a hoarse voice (9)
- 4 The type of stridor seen in supraglottitis (11)
- 5 Name given to the surgical procedure to remove a thyroglossal cyst (8)
- 6 A cause of 25% of all laryngeal cancers (5,14)
- 9 Eponymous name given to the chronic oedematous swelling of the vocal cords seen in smokers (7)
- 12 The name of the vaccination that protects against epiglottitis (3)
- 13 The name of the condition often described by a disproportionate sore throat to the clinical findings of a normal oropharynx (12)
- 14 The nerve that innervates the soft palate to allow the patient to say "ah" (10)
- 17 The pathogen most commonly to blame in a sore throat (5)

Enjoyed these challenges? More puzzles and the answers to those above can be found @ <https://www.enteducationswansea.org/ent-puzzles>

