ENT & mouth considerations in the elderly

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Session Aims and Objectives

Overall aim of this workshop is to:

- Understand the relevant anatomy and physiology of Ear, Nose, Throat & Mouth to enable development of physical assessment skills
- Develop understand of some of the major physiological changes that occur in the older person
- Discuss the management of a few common conditions seen in the older person

Session Agenda

- EARS
  - Brief overview of A&P
  - Changes in ageing
  - Assessing hearing
  - Examination of the ear
  - Common conditions
    - Ear wax
    - Otitis externa/media
  - Dizziness
  - Tinnitus
- NOSE
  - A&P and examination
  - Polyps
  - Nose bleed
- Mouth
  - Oral heath:
    - Tongue/ saliva gland/ teeth
    - Throat
    - Dysphagia

Anatomy of the ear

MIDDLE EAR

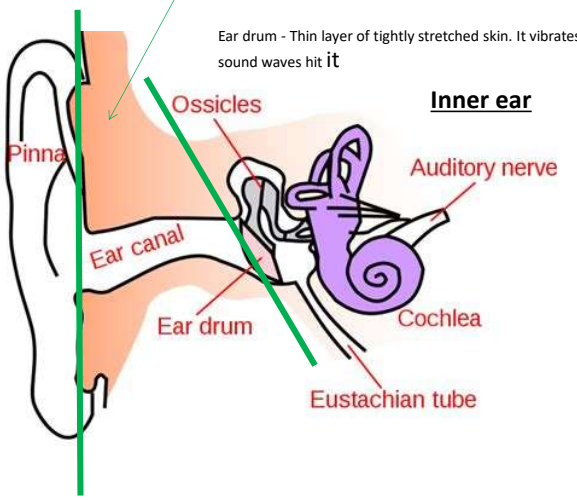
Ear canal - Tube that runs from the outer ear to the inner ear.

Lined with cells that produce ear wax: Protects the ear by trapping dirt and fighting infections

Ear drum - Thin layer of tightly stretched skin. It vibrates when sound waves hit it

Outer /external ear /pinna

- Funnel shaped
- Collects sound waves and send them to inner ear



Hammer or Malleus - One of the three tiny bones in the ear. It moves when the ear drum vibrates

Anvil or Incus - The second tiny bone in the ear. The anvil is moved by the hammer

Stirrup or Stapes - The third tiny bone in the ear. It is moved by the anvil

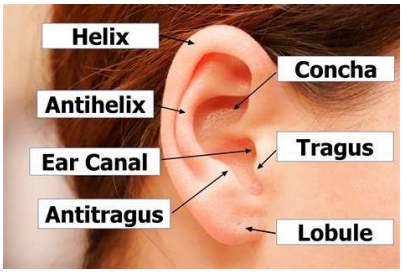
Cochlea - Spiral tube. When the stirrup moves, fluid inside the cochlea moves. Hearing receptors turn the movement into signals

Auditory nerve - Carries messages from the cochlea to the brain. The brain makes sense of these signals as sounds

Ref: BBC Bitesize

Examining the ear

- Inspect the auricle and surrounding tissue for deformities, lumps, skin lesions , redness or heat
- Move the auricle up and down (tug test) – check for pain, discharge or inflammation
- Press tragus
- Press firmly behind the ear
- Palpate mastoid bone



Pinna: Healthy

Pinna

EARS: Ageing changes

- Wax becomes thicker and up to ¼ of elderly patients need to have it removed
- Ear drum becomes thicker
- Sclerotic changes to muscles and joints in middle ear
- Brain becomes slower at processing auditory information
- Loss of hair inside the semi-circular canals impairs balance
- Reduction in vestibular nerve cells adds to increased risk of dizziness
- 70% of > 70's have hearing loss
  - Should be considered for a hearing aid

- Age related hearing loss (presbycusis) is a slow, progressive loss of hearing
  - Mostly affecting higher pitches sounds
  - Consonants and word endings are frequently missed

- Mild- 27%: Difficulties following conversations in noisy room
- Moderate -36%: Have difficulties following speech without a hearing aid
- Severe- 6%: May have to lip read/sign even with hearing aids
- Profound -1%: likely to lip read/signing

Ref: Nichol & Wilson, 2012 & Nagaratnam et al,

EARS: Ageing changes

Good hearing depends of integration of 3 processes:

1. External ear
2. Middle & Inner ear
3. Auditory nerve & central auditory processing (brain)

Management of Hearing Loss

- Check for wax and administer softening drops
  - May need micro suction
  - If persists after wax removal: needs audiometry
- Hearing aid ?

- Nerve deafness
  - Presbycusis
  - Ototoxic drugs eg gentamycin & furosemide in high doses
  - Nerve compression eg acoustic neuroma
- Conduction deafness
  - Impacted wax
  - Otoscelerosis
  - Post infections
  - Pagets disease of the bones

Ref: Nichol & Wilson, 2012 & Nagarathnam, et al, 2016

How is hearing measured?

Db (decibel)	Source
180	Rocket engine at 30 meters
150	Jet engine eat 30 meters
140	Rifle being fired at 1 m
130	Threshold of pain
120	Rock concert /jet aircraft taking off at 100m
110	Accelerating motorcycle at 5 m/chainsaw at 1 m
100	Pneumatic hammer at 2 m / inside disco
90	Loud factory/ heavy truck at 1 m
80	Vacuum cleaner at 1 m/ kerbside of busy street
70	Busy traffic at 5 m
60	Office or inside restaurant
50	Quiet restaurant insider
40	Residential area at night
30	Theatre – no talking
10	Human breathing at 3 metres
0	Threshold of normal human hearing

Ref: Robb & Watson, 2007: page 9

Assessing hearing

No difficulties with faint speech	Normal hearing	0-25 dB
Difficulties only with faint speech	Mild hearing loss	25-45 dB
Frequent difficulty with normal speech	Moderate hearing loss	45-55 dB
Frequent difficulty with loud speech	Moderately severe hearing loss	55-70 dB
Can understand only shouted or amplified speech	Severe hearing loss	75-90 dB
Usually cannot understand even amplified speech	Profound hearing loss	95-100 db

Ref: Robb & Watson, 2007: page 9

Rinne & Weber test

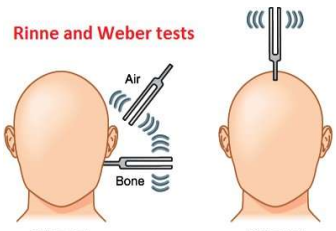
512 Hz tuning fork

Rinne's test:
First, hold tuning fork on mastoid process (bone conduction BC))
Then in front of ear (air conduction- AC)

Normally, air conduction persists twice as long as bone conduction.

A normal Rinne's test is called a 'Positive Rinne's test'.

Rinne-negative test is abnormal and means that bone conduction is greater than air conduction.



Hearing loss	Rinne test (Conduction)	Weber test (Localization)
None	Air > bone	Midline
Sensorineural	Air > bone	Normal ear
Conductive	Bone > air	Affected ear

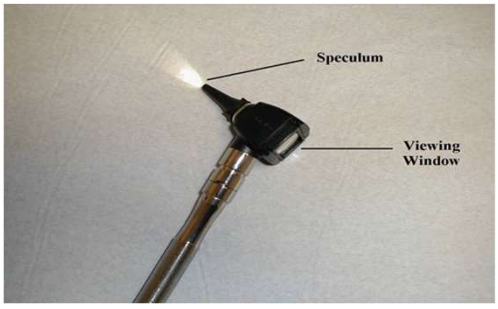
WEBER
Tuning fork is held on the vertex of ear

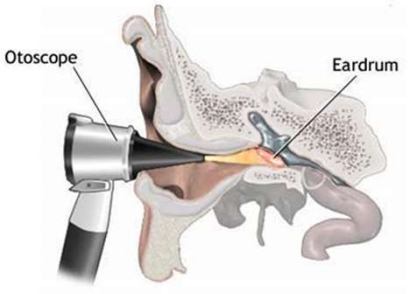
Ask patient which ear if loudest- good ear or deaf ear

With complete sensorineural deafness in one ear, BC from the other ear with be better than air conduction

Auroscope

Choose the largest speculum that will comfortably fit into the ear canal, since this will give the best view and admit the most light





Examining the ear

- Position patient so that you are comfortable
- The auroscope should be held in the left hand when examining the left ear and
- in the right hand when examining the right ear.

- The external auditory meatus (EAM; ear canal) should be straightened by gently lifting the pinna upwards and backwards to straighten the ear canal
- Then the auroscope is gently inserted along the line of the ear canal.
- Bear speculum downward and forwards

The Ear Canal

Inspect canal

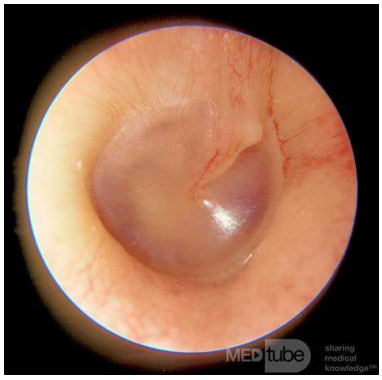
- discharge
- foreign bodies
- redness
- swelling
- wax (cerumen) – yellow and flaky to brown and sticky – dark and hard, wax may obscure view

Normal tympanic membrane

LEFT

Left:
Light cone @7 o'clock

RIGHT



Right
Light cone @ 5 0'clock

Ear wax

- Normal protective secretion-
  - Leave alone unless problematic
  - Wax provides protection to the skin & acts as a water repellent
  - Slightly acidic : discourages bacterial and fungal growth
- Do not use cotton buds to clean ears
- Wax softeners can aid natural removal
- Ear syringing is a very skilled intervention

Wax softeners:_ use for a couple of weeks. Can facilitate normal migration of wax out of the ear canal

Advise patient to lie with the affected ear upwards for a few minutes after drops have been inserted

- Warm olive oil drops
- Sodium bicarbonate ear drops

Ref: NICE 2021 ; Robb & Watson2007

Cholesteatoma

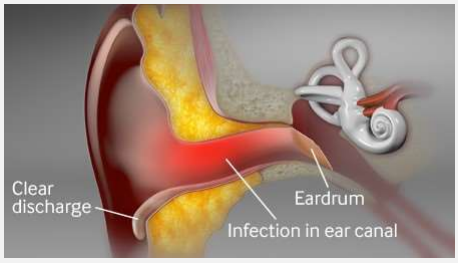
- Refer GP urgently for 'stubborn' attic wax
- May be a cholesteatomas
  - Collection of abnormal cells that gather deep inside the ear and form a skin-lined cyst.
  - This sac can be filled with air, fluid or dead skin cells.
  - Forms near the eardrum, expanding towards the middle and inner ear.
  - Not a cancerous growth, but it does grow aggressively & eventually it will eat into the bone.

Otitis Externa

Otitis externa is **inflammation** of the **external ear** (canal +/-auricle), outer surface of the eardrum

Frequently becomes infected by common bacteria such as Pseudomonas and Proteus,

Secondary infection with Staph aureus and coliforms from digital contamination may result



It can be:

Localised
Malignant otitis externa
Diffuse Otitis Externa

Otitis Externa: Presentation & History

Symptoms include any combination of the following:

- Itch (typical)
- Severe ear pain, disproportionate to the size of the lesion (typical)
- Pain worsened by movement of the tragus or pinna, or when an otoscope is inserted
- Weeping watery discharge ma be present
- The ear canal can become oedematous closing off the external ear and preventing visualisation of tympanic membrane
- Tenderness on moving the jaw
- Tender regional lymphadenitis
- Sudden relief of pain if localised furuncle bursts
- Loss of hearing

Otitis externa

- Redness, swelling or eczematous ear canal or external canal with shedding of scaly skin
- Discharge or debris may be present
- Inflamed ear drum, which may be difficult to visualise if the ear canal is narrowed or filled with debris

Infection can spread to pinna and skin around ear resulting in a perichondritis of the pinna and localised cellulitis

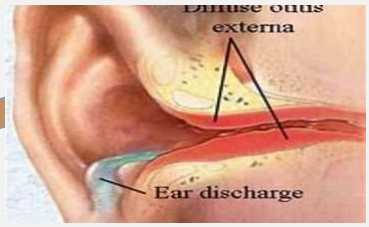
TREATMENT:

Below measures are enough for most cases as usually mild and self-limiting

- Treat pain with analgesia
- Application of local heat e.g. warm flannel
- Topical treatment is recommended in mild to moderate cases (OTC acetic acid (Ear Calm for 7 days) – mild antibacterial/anti fungal
- More severe cases, need a combination of antibiotic & steroid:
  - Eg. Otimize
- If the skin is dry and flaky: needs an oily steroid/antibiotics such as Locorten-vioform)

Malignant Otitis Externa

- An aggressive infection predominantly affecting immunocompromised, elderly, and diabetes mellitus patient.
- Otitis externa spreads into the bone surrounding the ear canal (mastoid and temporal bones).



REFER

- Symptoms are not improving within 48–72 hours of starting initial treatment.
- Initial treatment fails within 7 days (NICE recommends within 2 weeks)
- The canal is completely close and needs cleaning
- Swelling and infection of pinna: needs IVB antibiotics
- Local cellulitis; needs IV antibiotics
- If the patient is systemically unwell
- If you suspect malignant Otis externa

If incision and drainage is required, the patient should be referred to the local ENT team

Otitis Media

- Presence of inflammation of the middle ear
- Acute or chronic secretory
- Ear pain may also be referred from the throat, teeth or temporomandibular joint
- Most cases of acute OM are **viral**
- 80 % resolve without antibiotics
- Antibiotics do not reduce the pain in the first 24 hours

Otitis Media: HISTORY

- Patients will complain of earache with or without aural discharge and deafness. Ask:
  - How long has the earache been present?
  - Did it come on suddenly or gradually?
  - Are they having any problems hearing?
  - Do they have a fever?
  - Do they have a lot of problems with ear infections?
  - Have they had a discharge from the ear?

Otitis Media: EXAMINATION

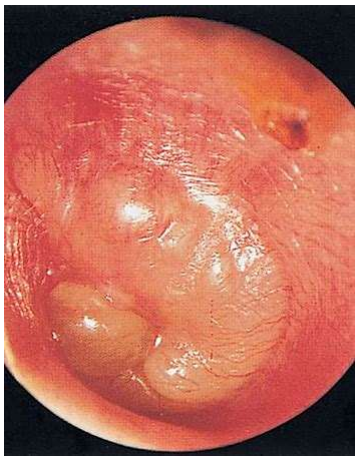
Examine both ears, assessing the pinna, canal and tympanic membrane.

The following may be visible:

- Distinctly red, yellow or cloudy tympanic membrane
- Moderate to severe bulging of the tympanic membrane with loss of normal landmarks
- An air fluid level behind the tympanic membrane
- Perforation of the tympanic membrane and/or discharge in the external auditory canal
- Check temperature, pulse and document absence/presence of tenderness of mastoid process.

Otitis Media

Normal ear drum



Bulging ear drum

Otitis Media

Otitis media with perforation

Otitis Media : treatment

- Most ear infections are viral and resolve spontaneously
- Antibiotics do not prevent deafness.
- Manage pain control and fever – paracetamol/ibuprofen
- Offer antibiotic treatment to patients who:
  - systemically unwell
  - high risk of serious complications due to significant co-morbidity
  - Immunocompromised
  - Bulging membrane (Purulent)
  - with a perforation and/or discharge
  - symptoms have lasted for 4 days or more and are not improving

Otitis Media: Referral

Immediate referral to GP or speciality:

- If you are unsure of the diagnosis
- Purulent discharge with a history of perforation, ENT surgery or grommets
- Tender mastoid cavity or previous mastoid surgery
- Patient looks very unwell

Consider routine referral to GP:

- Perforated tympanic membrane - will need GP r/v after 2 weeks, or until healed
- If patient is having frequent attacks
- If you suspect underlying condition that needs ongoing primary care management-

DIZZINESS : Imbalance and vertigo

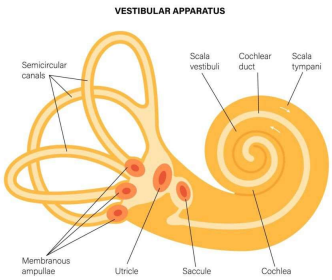
BALANCE depends on information received by the brain from three peripheral sources: eyes, muscles& joints and joints, and vestibular apparatus

- All three of these information sources send signals to the brain

DIZZINESS *=symptom and not a diagnosis with multiple causes .*

Unspecific term:

- *Light-headedness*
- *Faintness*
- *Unsteadiness*



VERTIGO: Feeling of movement in space
Specific term

DIZZINESS –a few causes .

- Labyrinth
- Acoustic neuroma: unilateral tinnitus
- Meniers disease : Triad of symptoms- often unilateral
  - Vertigo
  - Hearing impairment
  - Tinnitus
- Migraines, diabetes, B12 deficiency
- Cardio-vascular causes- several includes medication
- Metabolic
  - Hypoglycaemia
  - Hypothyroid
- Psychiatric
  - Anxiety/depression
- Other
  - Anaemia

Tinnitus

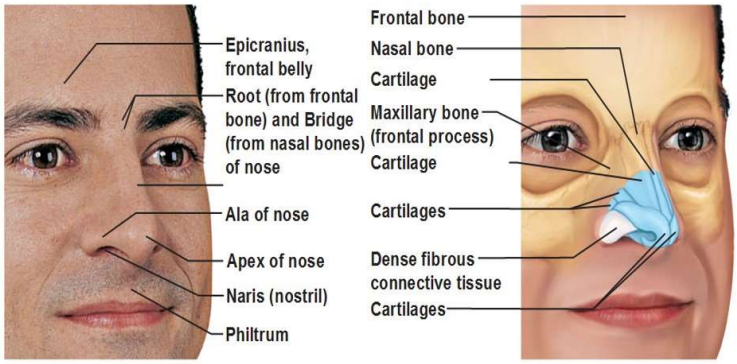
- Intermittent or constant noises in ear- often described as:
  - Rushing
  - Buzzing or
  - Roaring
  - Can be pulsating (may be vascular in origin)
- Commonly associated with presbycusis
  - ? If brain is trying to 'replace' missing noise
- Can be noise induced
- Affects over 20% of > 65 year olds
  - Severe symptoms in 5%
  - Incapacitating in 0.5%

MANAGEMENT

- If unilateral: needs MRI
- Discontinue medication that can be implicated
  - Aspiring- NSAIDS- loop diuretics-
  - often self limiting
  - Hearing aids may help if associated with hearing loss
  - Minimise stress & tiredness
  - Masker that produces 'white noise' may be helpful
  - Can cause depression – may need anti depressants
  - CBT for severe cases
  - British Tinnitus Association
  - ?? NMDA receptor blocker (neramexane) but not yet licensed

Ref: Nicholl & Wilson, 2012

NOSE



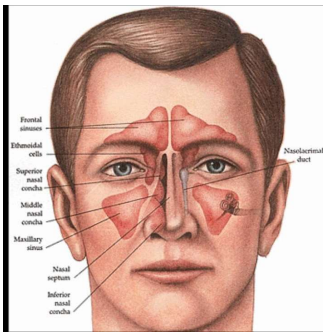
The upper 1/3 of the nose is bone- but the lower 2/3 is cartilage

NOSE

Function of nose & sinuses ??

NOSE & Sinuses: FUNCTION

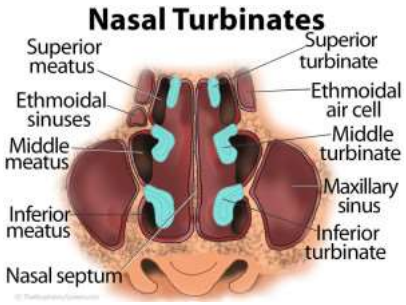
- To breathe
- Filter the air :
  - clearing foreign matters
  - barrier for the immune system to keep harmful microbes from entering the body
- Moistening & warming inspirited air
- SMELL via CN1
- Shock absorber
- Lightening the skull
- Resonating chamber for speech



NOSE : A&P

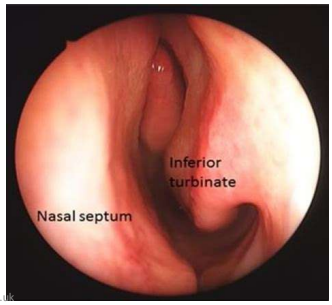
- **VESTIBULES** The most anterior portion of the nasal cavity is called the vestibule. Its essentially just a short passageway lined with hair that leads into the respiratory region of the nasal cavity.
- **Nasal septum** is the wall in the middle of the nasal respiratory cavity. It is made up of the septal cartilage
- **Blood vessels :** has a vast and complicated blood These arteries form connections with each other called anastomoses. The blood vessels in the nasal cavity are essential to the function of warming and humidification of the air

NOSE: Turbinates



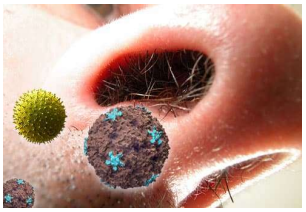
Turbinates (or meatus

- These are3 curved 'shelves' of bone contained a networks of blood vessels
- They are responsible for warming, humidifying, and filtering the air we breathe
- They project from the lateral walls of the cavity and are called the superior, middle and inferior turbinates



NOSE : respiratory region

- The respiratory region makes up the largest portion of the nasal cavity.
- The nasal cavity is lined with ciliated pseudo-stratified epithelium and mucus-secreting goblet cells.
- The epithelium has tiny hairs (cilia) that project out of it and move back and forth to sweep mucus out of the respiratory tract.
- **Function of the mucus:**
  - **Acting as lubricants:** They help keep the nose and sinuses moist. This protects them from irritation caused by rubbing against an object or particle.
  - **Protection**: the tissues in the nose and sinuses are quite fine and delicate. Therefore, mucus helps protect them.
  - **Barrie**r that helps trap and expel foreign particles that enter the nose. For example, , dust, pollen, bacteria and viruses.
  - Key role in fighting allergies and colds

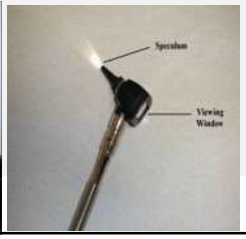


Mucous changes color : usually because of the substances that a person has come into contact with

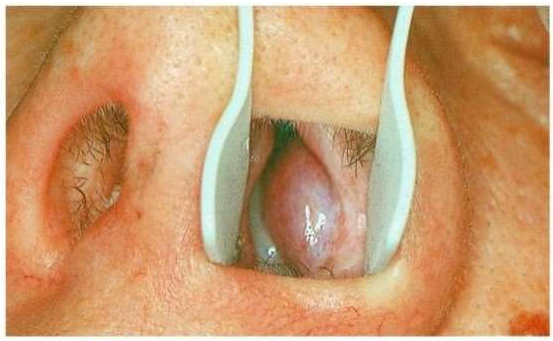
The Nose and sinuses: Examination

- Inspect skin: scars, bruising , pustules
- Inspect anterior and inferior surfaces of the nose
- Apply gentle pressure on the tip of nose to widen the nostrils
- Partial view of vestibule
- Symmetry or deformity
- Test smell
- Any discharge ?

- Test of nasal obstruction , press each nostril in turn and ask patient to breath in.
- Inspect the inside of the nares with an otoscope and the largest ear speculum



NOSE & Sinuses: examination



Insert speculum gently into the vestibule of each nostril – avoid contact with septum. Why?

NOSE : Polyps

- Painless soft growths inside the nose.
- They're not usually serious, but they can keep growing and block the nose if not treated.

Symptoms of nasal polyps include:
•blocked nose
•runny nose
•constant need to swallow (post-nasal drip)
•reduced sense of smell or taste
•nosebleeds
•Snoring

Treatment: usually steroid drops

Ref: NHS 2020, b)

NOSE: skin

The face and nose in particular is a common site for skin cancer as exposed to sun

Refer to GP if:

- a spot or sore that doesn't heal within 4 weeks
- a spot or sore that hurts, is itchy, crusty, scabs over, or bleeds for more than 4 weeks
- areas where the skin has broken down (an ulcer) and doesn't heal within 4 weeks, and you can't think of a reason for this change

Ref: Cancer Research , 2020

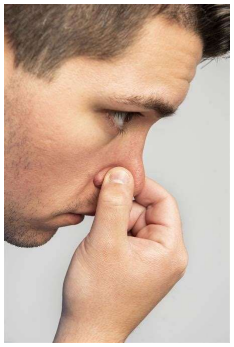
NOSE Bleed (Epistaxis)

- Acute ;
  - GOOD History
  - ***Most are short, self limiting and occur from Little's area (anterior 1/3 of nasal septum***
- Recurrent
- Posterior and anterior
- Check if hemodynamically compromised
- First aid
- When to transfer to ED /secondary care

- Local causes
  - Trauma
  - Nose picking
  - Nasal sprays
  - Infection
  - Tumours
  - FB
  - Idiopathic
- Systemic causes
  - Coagulation disorder (eg von Willebrand disease) or medication (eg warfarin)
  - Liver disorder
  - Leukaemia

NB: Hypertension may prolong a nose bleed but is usually not the cause of it

NOSE bleed:



CHECK VITAL SIGNS

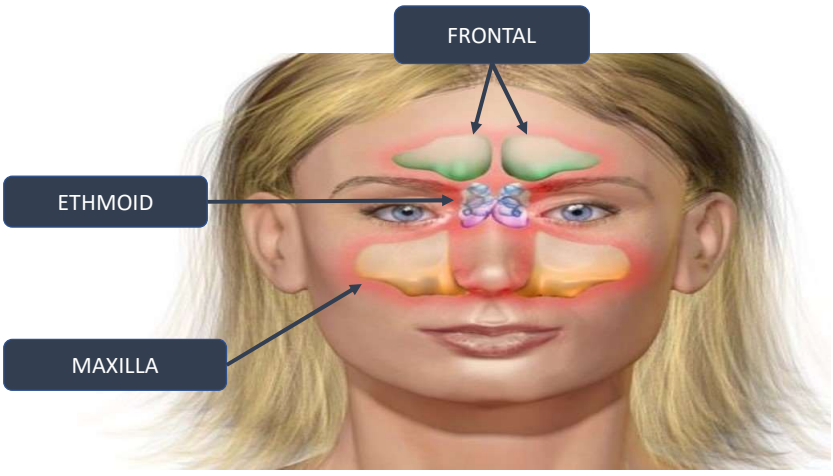
- Ask hem to sit down and lean with their head tilted forward.
- Do not tell them to lean their head back as this could cause the blood to trickle down the back of their throat and block the airway.
- Ask them to breathe through their mouth and pinch the soft part of their nose. Give them a clean tissue to catch any blood.
- After 10 minutes they can release the pressure on their nose. Ask them to pinch their nose again if the bleeding has not stopped. They should do this for two further periods of 10 minutes.
- Once the bleeding has stopped, ask them to keep leaning forwards while you clean around their nose with lukewarm water.
- Once clean, advise them to rest, avoid exertion or blowing their nose to prevent disturbing the clots.

Ref: SJA

NOSE bleeds : WHEN TO REFER

- the bleeding continues for longer than 20 /30 min minutes
- the bleeding is heavy and the patient has lost a lot of blood
- Patent is having difficulty breathing
- The patient has swallowed a large amount of blood that makes you vomit
- If the patient is taking a blood-thinning medicine such as warfarin or have a clotting disorder such as haemophilia and the bleeding doesn't stop
- If the patient is having symptoms of anaemia such as heart palpitations, shortness of breath or a pale complexion/mucous membranes
- Recurrent nosebleeds that come and go regularly

Sinuses



Sinusitis

- Inflammation of the mucosal lining of the paranasal sinuses
- Acute (duration <12 weeks) or chronic
- Acute sinusitis normally follows a common cold and is defined as an increase in symptoms after 5 days, or persistence of symptoms beyond 10 days, but less than 12 weeks
- Mostly viral
- Also bacterial or chronic allergic in aetiology

Sinusitis: History

In adults: diagnose acute sinusitis by the presence of:

- Nasal blockage or coloured nasal discharge - usually bilateral and caused by rhinitis (anterior or posterior drip)
- Facial pain/pressure - may be localized over the infected sinus, or it may affect teeth, the upper jaw, or other areas (such as the eye, side of face, forehead) and/or reduction of the sense of smell, pain also made by leaning forwards. Pain in the absence of other symptoms is unlikely to be sinusitis

Sinusitis

Acute Bacterial Sinusitis should be suspected when at least three of the following are present:

- Discoloured or purulent discharge (usually unilateral)
- Severe local pain (usually unilateral)
- Fever >38'c
- Marked deterioration after an initial milder form of the illness

Examination:

Inspect and palpate the maxillofacial area to elicit swelling and tenderness

Examine the anterior nostrils for nasal inflammation, mucosal oedema, mucopurulent nasal discharge

Other diagnosis to consider is allergic rhinitis, nasal polyps, foreign body, Temporo-mandibular joint (TMJ) dysfunction, dental problems and other causes of headache

Sinuses Examination

- Palate for sinus tenderness
- Press fontal sinus from under the bone brows
- Avoid pressure on eyes
- Press up maxillary sinus

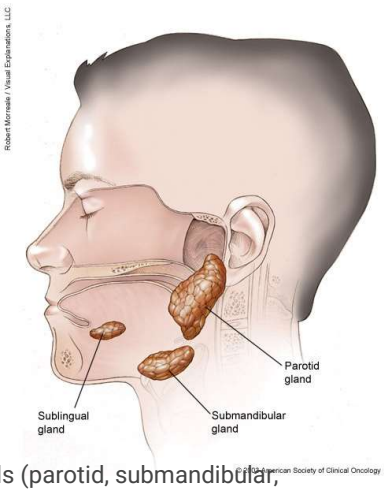
Sinusitis: Treatment and advice

- Sinusitis resolve within 2-3 weeks without antibiotics (NICE CKS Sinusitis)
- Reassure patient - the condition is likely to be viral and self-limiting
- Trial of nasal saline or nasal decongestants (although evidence is lacking to support their use)
- Symptoms 10 days =/> with no improvement consider prescribing a high-dose nasal corticosteroid for 14 days for adults (mometasone 200 micrograms twice a day)
- Only prescribe antibiotics for patients with a co-morbidity that makes them high risk of complications, or when acute bacterial sinusitis is suspected.
- **Consider referral if:**
  - Unsure of diagnosis
  - Patient very unwell
  - Symptoms persist after 2 weeks
  - The very elderly
  - Symptoms persist after second line antibiotics
  - Significant co-morbidities

MOUTH & THROAT

Oral health changes

- Saliva is crucial to oral processing of food
- Aging affects the salivary glands and alters flow rate and quality (e.g., ion and protein composition, rheology, tribology) of saliva.
- Therefore older adults may suffer from dry mouth, taste changes and poor oral hygiene, greatly affecting their quality of life.



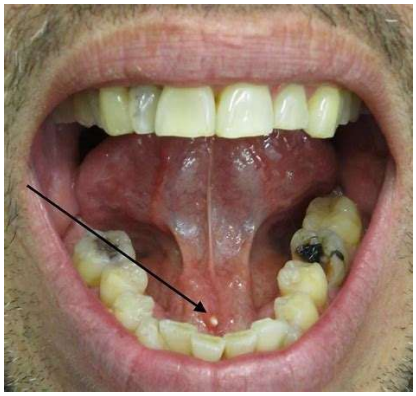
Humans have three paired major salivary glands (parotid, submandibular, and sublingual), as well as hundreds of minor salivary glands. An average person produces between 0.5 and 1.5 liters of saliva every day.

Ref: Xu et al, 2019

Tongue

- Movement
  - Assess movement and look for any abnormalities such as fasciculation (Motor Neurone Disease)
- Surface
  - Look at colour and mucosa of tongue
  - Coating usually just due to lack of fibre or abrasive food in diet
- Under the tongue : any abnormalities ?
- Salivary Glands

Saliva gland stone



- Not always visible
- dull pain in mouth that comes and goes
- swelling in mouth that flares up from time to time
- Intense pain during mealtimes,
  - could mean the stone is completely blocking a saliva gland.
  - The pain usually lasts 1 to 2 hours.

Symptoms management:

- sucking on a lemon or lemon drops
- drinking plenty of water
- gently massaging around the stone
- Paracetamol for pain
- Suck on ice cubes/lollies if swollen

- Refer to GP;

Oral health changes : TEETH

- In the UK 65% of people aged 65 and over have no natural teeth-
  - Rises to 82% in those over 75
- 60% of patients are unhappy with their dentures
  - 12% never wears them
- Gum ridges recede with age and patients will need new dentures

Tooth wear: Occurs due to :

- Abrasions: interaction between tooth and material, eg brushing teeth ., Foreign objects
- Attrition: loss of tooth tissue to due tooth on tooth contact, eg grinding teeth
- Erosion (Acids: eg regurgitation; coke and fruit) –
- DE mastication: during chewing

Tongue abnormalities

Red, smooth , swollen tongue:
Iron Deficiency

Glossitis:
Vitamin B deficiency

Tongue

Treat:
anti fungal , eg canesten, fluconazole

Oral thrush common in elderly patients with dentures

- May have cacks at the corners of the mouth
- not tasting things properly
- an unpleasant taste in the mouth
- pain inside the mouth (for example, a sore tongue or sore gums)
- difficulty eating and drinking

Tongue

Asymmetrical protrusion of tongue :

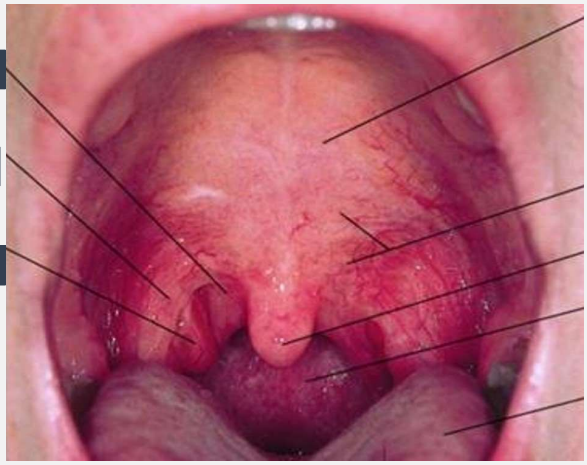
Needs urgent referral for investigation

Geographic Tongue

Characterised by irregularly-shaped, red, map-like, smooth and swollen patches surrounded by white lines

Benign conditions- no real cure

The Throat
A&P



Sore Throat

- Sore throat is a symptom
- Involves inflammation of the upper respiratory tract
- Four regions are principally involved
  - pharynx
  - larynx
  - tonsils
  - epiglottis (rarely)
- Sore throat is usually due to a viral infection
- mostly associated with the common cold
- a symptom of influenza or infectious mononucleosis (glandular fever)
- Bacterial sore throat is commonly caused by Group A beta-haemolytic streptococcus and may cause pharyngitis, tonsillitis and scarlet fever.
- Sore throat due to viral or bacterial cause is often self-limiting with symptoms resolving in 1 week in approximately 85% whether due to viral or streptococcal infection.

Acknowledgement: Freda Dune-Takavarasha

Sore Throat: History and Examination

- SOCRATES/OPQRSTU. What other questions might you ask
- Do NOT examine anyone who is **drooling** as there is a risk of epiglottitis
  - Refer to A&E/ ENT
- Throat swabs should not routinely be carried out

Acknowledgement: Freda Dune-Takavarasha

Throat
Techniques for Examination

- Ask patient to open mouth and say ah or yawn - this helps see the posterior pharynx
- Can also use the tongue depressor blade firmly but gently held down on the midpoint of the arched tongue – simultaneously ask for an ah/yawn. Must **not** cause gagging.
- Inspect soft palpate, anterior and posterior pillars, uvula, tonsils and pharynx.
  - Note colour, symmetry and looks for exudates, swelling, ulceration or tonsillar enlargement. If possible, palpate suspicious areas for induration/tenderness.

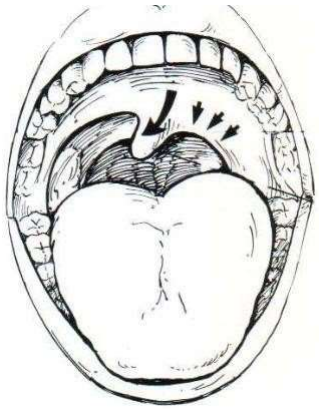
Acknowledgement: Freda Dune-Takavarasha

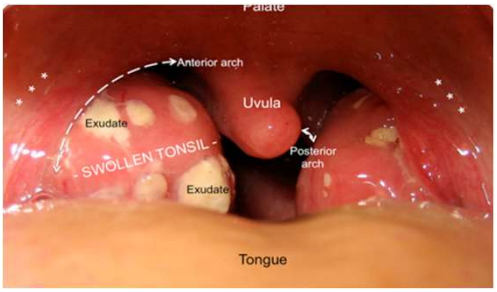
Sore throat: Findings

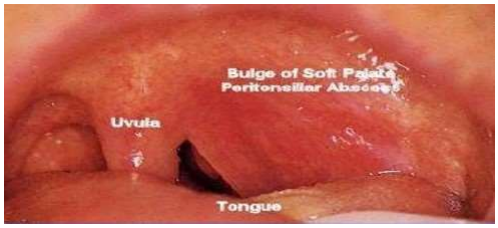
- A diffuse redness of the pharynx
- Redness and swelling of the tonsil +/- pus (exudate) in the crypts
- One sided swelling around the tonsils that may be pushing the uvula to one side (a peri-tonsillar abscess)
- Small haemorrhages of vesicles on the palate
- Lymph nodes in the neck may be swollen and tender
- Patient presents with fever

Acknowledgement: Freda Dune-Takavarasha

Tonsillitis

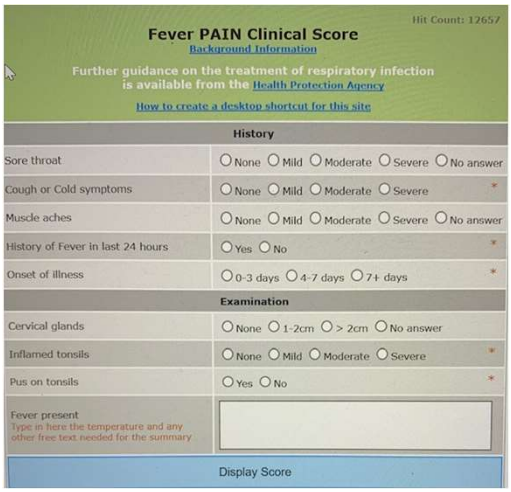






Acknowledgement: Freda Dune-Takavarasha

Tonsillitis : Fever Pain score



Fever PAIN Clinical Score

Hit Count: 12657

Background Information

Further guidance on the treatment of respiratory infection is available from the Health Protection Agency

How to create a desktop shortcut for this site

History	
Sore throat	None / Mild / Moderate / Severe / No answer
Cough or Cold symptoms	None / Mild / Moderate / Severe *
Muscle aches	None / Mild / Moderate / Severe / No answer
History of Fever in last 24 hours	Yes / No *
Onset of illness	0-3 days / 4-7 days / 7+ days *
Examination	
Cervical glands	None / 1-2cm / > 2cm / No answer
Inflamed tonsils	None / Mild / Moderate / Severe *
Pus on tonsils	Yes / No *
Fever present Type in here the temperature and any other free text needed for the summary	

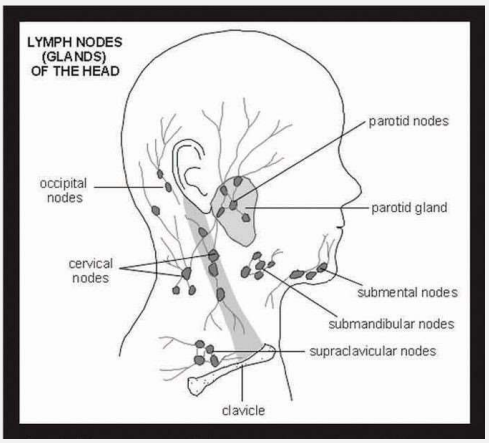
Display Score

- Score 0-1 = 13-18% streptococci, use NO antibiotic strategy
- Score 2-3 = 34-40% streptococci, use 3 day back-up antibiotic prescription strategy
- Score ≥4 = 62-65% streptococci, use immediate antibiotic if severe, or 48 hour short back-up prescription

Ref: https://medicines.necsu.nhs.uk/feverpain-clinical-score/?highlight=assessment of pain

Sore throat examination

- Lymph node exam (JACCOL)
- CVS/RS
- Don't forget T,P,R and B/P



Dysphagia

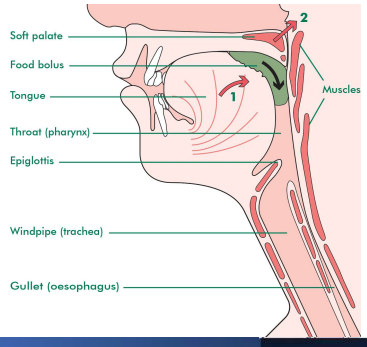
Dysphagia is the medical term for a swallowing difficulty. It stems from Ancient Greek: Dys = difficult + Phagia = eating. It translates literally as a difficulty eating.

The terms swallowing difficulty and dysphagia can be used interchangeably.

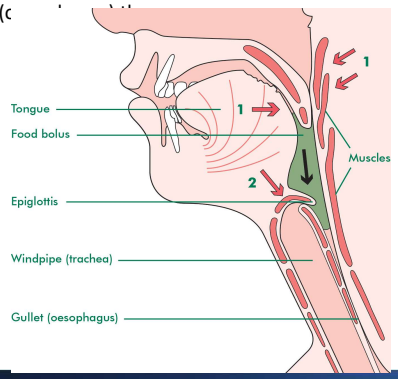
It is usual to separate signs of dysphagia from other cognitive or physical factors that impact on a person's ability to eat and drink, although often these issues often go hand in hand.

Chewing & Swallowing

- Chewing & saliva prepares the food for swallowing by forming a soft ball
- When the food bolus is ready to be swallowed, the tip of the tongue squeezes against the roof of the mouth & food is moved into the back of the throat (pharynx).
- The soft palate moves up, closing the gap between the nose and mouth. This stops food from passing into the nose.



- As food moves into the throat, the muscles in the base of the tongue and throat (pharynx) squeeze together. This moves the bolus of food down.
- The larynx lifts in the throat and the epiglottis moves to close the airway, stopping food going into the airways and lungs. The vocal cords close and the voice box moves upwards to further protect the airway. The gullet (o



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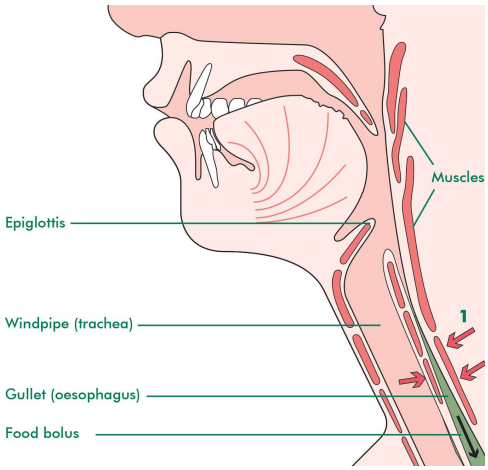

Finally, the muscles in the oesophagus squeeze and relax, pushing food down towards the stomach.

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Dysphagia

Signs of Dysphagia

- Coughing or clearing the throat when eating or drinking, or immediately after
- Choking
- Pocketing food or food residue in the mouth after swallowing
- Food or drink dribbling/spilling from the mouth
- Difficulty chewing or moving food around the mouth
- Holding food in the mouth with difficulty initiating the swallow
- Swallowing looking 'difficult'
- The voice sounding 'wet', 'croaky', or 'bubbly' during/after eating or drinking
- Change of face colour or breathing pattern after swallowing
- Leaving certain foods or pushing the plate away

Signs of cognitive impairment

- Difficulties will reflect the aspects of brain function that are affected in a particular resident.
- Someone might:
- Forget when they last ate, or lose track of the task of eating
- Have difficulty locating and recognising utensils and food
- Have difficulty using a knife and fork, or opening their mouth when presented with a spoon
- Have socially inappropriate mealtime behaviour or eat too quickly, or cram food
- Have problems sitting at the table, and poor concentration when eating due to pacing or agitation
- Have difficulty accepting help from others, throwing food, or hitting out
- Refuse foods because of delusional ideas
- Have hallucinations which disturb concentration

Ref: e-lfh

Dysphagia

Causes of dysphagia includes:

- a condition that affects the nervous system, such as a stroke, head injury, multiple sclerosis or dementia
- cancer – such as mouth cancer or oesophageal cancer
- gastro-oesophageal reflux disease (GORD) – where stomach acid leaks back up into the oesophagus

- ***Refer GP for new onset -***

Treating dysphagia

Treatment usually depends on the cause and type of dysphagia.

- Many cases of dysphagia can be improved with careful management, but a cure isn't always possible.

Treatments for dysphagia include:

- speech and language therapy to help people recover their swallowing with special exercises and techniques
- changing the consistency of food and liquids to make them safer to swallow
- other forms of feeding – such as tube feeding through the nose or stomach
- surgery to widen the oesophagus, by stretching it or inserting a plastic or metal tube (stent)

Ref: NHS 2021

Dysphagia

Further learning on DYSPHAGIA:

- https://portal.e-lfh.org.uk/

  SEARCH DYSPHAGIA

  Dysphagia Essentia

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