DENTAL, ENT and MAX FAX

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DENTAL PROBLEMS

During working hours registered patients with dental problems should be referred to **their own dentist.** If they have no dentist they can contact Chalmers Dental Centre.

Out of hours if felt can be redirected from triage can phone 111 for follow up or the dentist in the morning.

DENTAL PROBLEMS - CLINICAL

Much useful advice for professionals and patients on common dental problems can be found on Scottish Dental Clinical Effectiveness Programme.

SIMPLE TOOTHACE

- Paracetamol and/ or Ibuprofen
- Avoid extremes of temperature with eating or drinking. Soft diet only
- Sleep with head elevated
- See own dentist

DENTAL INFECTION

Refer to OMFS on call if:

- Significant facial or neck swelling or difficulty breathing (MAY NEED ANAESTHETICS/ITU)
- Dysphagia
- Limited mouth opening
- Systemic symptoms
- Stridor
- Change in voice quality

Otherwise:-

- Give analgesia and antibiotics
- Depending on allergies Pen V, amoxicillin, clarithromycin, doxycycline or metronidazole
- See own dentist

AVULSED WHOLE TOOTH

- If teeth are missing as a result of the trauma but unaccounted for consider chest XR as they might have been inhaled
- Adult teeth can be re-implanted if kept moist in milk, saline or saliva and ideally, if done within 1 hour of trauma, but worth attempting if longer time elapsed
- Avoid touching the root[s] of the broken tooth/teeth-handle from the crown
- Clean in/ irrigate gently in N Saline to remove any foreign bodies. Damp sterile gauze swab may be used to lightly remove any foreign bodies [e.g. grit] from root surface
- Irrigate the tooth socket to remove clot
- Re-insert tooth into socket [the right way round] and get them to bite down on gauze to keep in place
- Do NOT re-implant milk teeth in children as this may damage the permanent tooth bud
- Give analgesia and antibiotics [Amoxicillin if not penicillin –sensitive] and Chlorhexidine mouthwash
- Refer OMFS for splinting.

BROKEN OR FRACTURED TEETH

- If there is any soft tissue injury consider X-ray of soft tissues to exclude fragments lost in the soft tissue, and if so contact OMFS On call
- Consider XR chest if suspicion of inhaled tooth
- Otherwise give analgesia
- See dentist

POST-EXTRACTION BLEEDING SOCKETS

- Remove old clot
- Bite hard on damp gauze (can soak gauze in TXA or adrenaline) over bleeding socket for 15 minutes
- Check medical history and medication
- Consider LA and placement of Surgicel into socket +/- resorbable sutures
- If unable to stop contact OMFS On call
- Antibiotics only if spreading infection, systemic infection or immunocompromise

NHS Lothian

Emergency Department MEDIC ONE

MAXILLOFACIAL TRAUMA

OMFS referrals can be made via email to **omfstraumareferrals@nhs.lothian.scot.nhs.uk**

FACIAL BONE FRACTURES

If any concern about airway or reduced GCS move to resus.

Examine

- For swelling and bruising of the face
- Look for subconjuntival haemhorrage
- Inferior orbital margin for any step or tenderness
- Eye movements ("blow out" fractures of the orbital floor can lead to muscle entrapment and give diplopia on upwards gaze)
- Is the eye itself injured? A squash ball may cause a blow-out orbital floor fracture and a retinal detachment within the globe
- Infra-orbital nerve - may be injured or compressed in the infra-orbital foramen and lead to paraesthesia or numbness in the cheek and upper lip
- If the patient is not too swollen then there may be obvious flattening of the zygomatic eminence and a palpable step deformity of the infraorbital margin
- Examine the nose for concurrent nasal fracture, if present arrange review with ENT if necessary.
- Mouth opening and patient's bite. There may be some restriction in mouth opening and movement side to side

Management

- Patients with confirmed on XR or clinical suspicion of facial fractures are best seen in the OMFS clinic when the facial swelling has subsided. This is 5-7 days after injury. Email them on email above
- Ensure you explain the need for the patient to attend the clinic. Advise them not to blow their nose

MANDIBULAR FRACTURES

Examination

- Look for bruising and swelling or tenderness along entire length of mandible
- Ask the patient whether his teeth feel as though they bite normally and examine intra orally to see if teeth come together
- Examine intraorally for any bruising and swelling including below the tongue
- Examine for loss of teeth. If teeth are missing as a result of the trauma, can they be accounted for? If not then consider chest X-ray
- In a co-operative patient who will not bite you, use a gloved finger to feel the mandible directly through the mucosa, rather than indirectly through their bruised chin

X-ray

- PA Mandible and orthopantomogram (OPG) are taken, if OPG not available then lateral obliques can be taken

Treatment

- Discuss # with OMFS on-call
- If through teeth bearing section or wound to chin or mouth treat as open fracture and cover with antibiotics

DISLOCATED MANDIBLE

- Patients present unable to close their mouth often after opening wide or yawning. They may have a previous history of dislocation

- If you can reduce the dislocation and the patient can get their teeth together then it does not need an OMFS review. Advise soft diet and analgesia
- If you cannot reduce the dislocation then contact OMFS On call
- If the patient can get their teeth together but has acute onset trismus with no history of infection and has pain over the tempero-mandibular joint (TMJ) then they may have an acute effusion in the TMJ. This is best managed with cold compresses to the affected side, soft diet and analgesia. It does not require referral to OMFS.

ENT

Patients attending the ED inappropriately (e.g. ear wax) should be referred back to their GP in the usual way unless they are unwell or distressed.

EAR

HAEMATOMA AURIS (Cauliflower ear)
- Traumatic blood clot stripping the perichondrium off the underlying cartilage
- If not drained, will lead to necrosis of the cartilage and the ugly deformity cauliflower ear
- If very large - refer directly to ENT staff for drainage.
- If small - drain by a small incision or aspirate with white needle and apply a pressure dressing
- Follow up with ENT

ACUTE OTITIS MEDIA
- Tympanic membrane red
- 50% viral, 50% bacterial (streptococcus or haemophilus)
- Antibiotics shown to be of little value
- If given limit amoxicillin to 5 days
- Refer to General Practitioner for follow up

ACUTE OTITIS EXTERNA

Acutely painful red ear with pus and debris in the external meatus.
- If severe - refer directly to ENT staff
- If less severe - mop gently and apply otomize ear spray. Then insert a small wick soaked in Benzene and Icthamol (very good for relieving pain)
- Mild cases - will settle with simple cleansing alone.
- Advise to keep ear dry
- Consider over the counter acetic acid ear drops (max 7 days)
- Refer to General Practitioner for follow up.
- May consider aural toilet
- May consider topical antibiotics +/- topical corticosteroid

ACUTE TRAUMATIC PERFORATION
- Usually the result of a direct blow to the ear or exposure to sudden loud noise, or infection
- May indicate basal skull fracture in more severe trauma
- Document conductive and sensorineural deafness using Rinne and Weber tests.
- Advise to keep absolutely dry.
- Try not to blow nose too hard as this can damage drum as it heals
- Usually gets better on its own within 2 months
- See GP if symptoms not improving after a few weeks and GP follow up to ensure healed

FOREIGN BODY IN EAR

- Try simple syringing with lukewarm water - if non organic
- Organic material will only swell up if wetted, olive oil is the liquid to use
- If the patient is co-operative, carefully try, once only, to remove the foreign body taking care of the tympanic membrane. Best to hook it from behind
- If unsuccessful, or the patient is uncooperative, refer to the ENT on call for removal under G.A

SUDDEN HEARING LOSS

- Refer directly to ENT staff

NOSE

NASAL FRACTURES

- Do not X-ray - it does not affect your management
- Check for the cosmetic appearance of the nose, a septal haematoma (looks like bunch of grapes), that the nostrils are patent bilaterally and that there is no CSF leak dripping from the nose
- If they have a septal haematoma (which will impair the blood supply of the cartilage) they should be referred to ENT immediately for this to be drained
- If the patient is 'happy' with the shape of their nose, their septum is intact and their airway is patent, and there is no CSF leak they will not require any follow-up
- Any patient with visible deviation or significant swelling should be referred to the ENT nurse-led clinic for assessment 5-7 days post-injury
- If there is nasal deviation at assessment then a proportion of these patients will undergo manipulation of nasal bones in order to attempt to correct this. There is a window of opportunity for correction as the bones will have begun to set 2 weeks following injury
- The ED receptionists can make an appointment for the patient to be seen in this clinic.
- Give patients a 'Injured Nose' written advice sheet

EPISTAXIS

See **link** to Epistaxis guidance

Other things of note

- Think about PPE for yourself (may require a mask, definitely apron and gloves)
- Assess and treat ABCs – most patients are not shocked but check their observations.
- Take a history including any anticoagulants
- Consider the need for IV access and bloods (if no clinical signs of anaemia, normal obs and bleeding has ceased not required)
- If bleeding doesn't stop with merocele packs may need posterior packing. Discuss with ED senior

FOREIGN BODY IN THE NOSE

- If the patient is co-operative and easy, consider mothers kiss, suction, or using small forceps or other tools but do not try repeatedly
- If the patient is uncooperative, or you are not successful after one attempt, refer to the ENT SHO

THROAT

FISH-BONE IN THROAT

If the patient is able to localise the side it is likely that the bone is stuck in the relevant tonsil of the back of the tongue

- You should be able to remove it under direct vision:
- spray throat with 4% Xylocaine
- Have a good light
- Use a tongue depressor and crocodile forceps

If the patient points to the midline it is likely to be an actual foreign body in the epiglottis / laryngeal area OR more likely a mucosal scratch.

- Take a soft tissue X-ray of the throat
  - (NB fish bones have variable opacity depending on the species of fish)
  - Look also for prevertebral soft tissue swelling or soft tissue/oesophageal gas
- If no foreign body is visible advise the patient to eat dry bread and return in 24 hours if pain persists
- If a foreign body is visible or the patient returns, refer to ENT

LARYNGEAL TRAUMA

- Usually caused by a direct blow to the larynx in a fight or a car accident.
- Be alert to any abnormality of airway/swallowing/speech
- Early senior anaesthetics + ENT involvement for airway assessment +/- direct visualisation +/- intubation (which could be difficult)
- Admit all cases for observation.