## History and Examination

Date and Clinic

Patient referred by…. (Dentist Bloggs)….regarding…(removal of lower wisdom teeth)

**Presenting complaint (PC)**

Remember SOCRATES

**S**ite

**O**nset

**C**haracter

**R**adiating

**A**lleviating

**T**iming

**E**xacerbating

**S**everity

**History of presenting complaint (HPC)**

**Medical History**

Heart/CVS; hypertension, previous MI, stroke, rheumatic fever or endocarditis, heart murmur, angina

Chest/Resp; Asthma, Bronchitis, COPD, Recurrent chest infections

Liver and Kidney function

Diabetes

Epilepsy

Musculoskeletal; Arthitis (Rheumatoid and Osteo), Osteoporosis

Bleeding Disorders; Congenital or medication related

Infectious diseases

Allergies

Medication;

Previous operations;

For all conditions identified, ascertain how well they are controlled. For example;

Angina…chest pain on during exertion (running/walking up stairs/standing up), never occurs at rest, eased when patient uses GTN spray. Patient only has to use the spray approximately once every six months.

**Social History (SH)**

Patient lives with;

Occupation

Smokes; how many a day for how many years?

Alcohol; units per week

**Examination**

**Extra-oral**

TMJ; click or crepitus on opening or closing

Cervical lymphadenopathy

Muscles of Mastication (Temporalis)

Mouth opening; trismus, deviation on opening?

Swelling/Lumps; site, size, overlying colour, texture (soft/firm/bony hard), fluctuance, associated structures and draw diagram

Cranial Nerves; particularly V and VII

**Intraoral**

Teeth present; caries, # restorations, generalised mobility, TTP, sinus or tenderness

Soft tissue examination; site, size, overlying colour, texture (soft/firm/bony hard), fluctuance, associated structures and draw diagram of lesions

Muscles of Mastication; masseter, lateral pterygoid

**Differential Diagnosis**

**Further Investigations**

Radiographs

Vitality Testing

Testing for cracked cusps (Cotton Wool)

**Definitive Diagnosis**

**Management/ Treatment Plan**

Does the patient need any further investigations prior to treatment?

For example;

Haematology patient-liaise with haematologist

History of high alcoholic intake; Bloods to include FBC, clotting screen and LFTs

## 2. Clerking a patient prior to surgery

Check the documentation from initial assessment

Has there been any change in the *presenting complaint* or *medical history*?

Is everything ready for surgery?

Images

Consent

Blood results

Lab work (splints, stents, models)

Marked patient (if applicable)

Complete the;

Correct Site Surgery form

VTE Prophylaxis form

Discharge form/TTOs

## Facial Trauma

|  |  |  |
| --- | --- | --- |
| **Suspected Fracture** | **Symptoms** | **Signs** |
| Mandible | History of traumaAltered sensation of lipTeeth not meeting properlyPain on opening mouth | Gingival or facial lacerationsSwelling and bruisingSublingual haematomaStep deformity (lower border of mandible)Mobility of mandibleMalocclusion and step deformity teethPara/anaesthesia of lower lipDamaged teethBleeding from the ear |
| Zygomatic complex | History of traumaPain and swelling‘Flat cheek’Numbness of cheek or teeth | Flattened zygoma/AsymmetrySwelling and bruising of cheekStep deformity (orbital rims) Peri-orbital ecchymosisSubconjunctival haemorrhagePara/anaesthesia of infra-orbital nerveTrismus and restricted lateral excursionEpistaxis |
| Isolated Orbit | History of traumaBlurred visionDouble vision | Step deformity in orbital rimEnopthalmus /ExopthalmusPeri-orbital ecchymosisSubconjunctival haemorrhagePara/anaesthesia of infra-orbital nerveRestricted eye movementsDiplopia**NB Retrobulbar haemorrhage**  |
| Midface fractures | Any of the above depending on level (Le Fort I, II or III) | As above but more specifically; Mobility of maxilla Mobile middle third of face Deranged occlusionPalpable crepitus in upper buccal sulcus‘Cracked pot’ percussion note from upper teethHaematoma intra-orally (zygoma or palate)Gagging on posterior teethAnterior open biteSeptal haematomaCSF leak (nose and ear) |

**Radiographs**

Radiographs in two planes

Mandible; OPG and PA mandible

Zygomatic complex (zygomatic butress, orbital rim) ; OM, OM15, or OM30

Le Fort Fractures, OM views

Communited or multiple fractures; consider CT scan

## Medical Emergencies

**Asthma**

Symptoms and Signs

Clinical features of *acute severe* asthma in adults include:

* Inability to complete sentences in one breath.
* Respiratory rate > 25 per minute.
* Tachycardia (heart rate > 110 per minute)

Clinical features of *life threatening* asthma in adults include:

* Cyanosis or respiratory rate < 8 per minute.
* Bradycardia (heart rate < 50 per minute).
* Exhaustion, confusion, decreased conscious level

Management

Salbutamol (100 micrograms/activation) with large volume spacer. Up to 10 activations every 10 minutes

Oxygen (15 litres per minute) should be given.

If any patient becomes unresponsive always check for ‘signs of life’ (breathing and circulation) and start CPR if indicated

**Anaphylaxis**

Signs and symptoms may include:

* Urticaria, erythema, rhinitis, conjunctivitis.
* Abdominal pain, vomiting, diarrhoea and a sense of impending doom.
* Flushing is common, but pallor may also occur.
* Marked upper airway (laryngeal) oedema and bronchospasm may develop,

causing stridor, wheezing and/or a hoarse voice.

* Vasodilation causes relative hypovolaemia leading to low blood pressure

and collapse. This can cause cardiac arrest.

* Respiratory arrest leading to cardiac arrest

Treatment

Use an ABCDE approach to recognise and treat any suspected anaphylactic reaction

Restoration of blood pressure (laying the patient flat, raising the feet) and the

Administration of oxygen (15 litres per minute).

Adrenaline intramuscularly (anterolateral aspect of the middle third of the thigh)

500 micrograms (0.5 Ml adrenaline injection of 1:1000)

Repeat if necessary at 5 minute intervals

**Antihistamine drugs and steroids, whilst useful in the treatment of anaphylaxis, are not first line drugs and they will be administered by the ambulance personnel if necessary**

**Myocardial Infarction**

Signs and symptoms

* Progressive onset of severe, crushing pain in the centre and across the front of chest. The pain may radiate to the shoulders and down the arms (more commonly the left), into the neck and jaw or through to the back.
* Skin becomes pale and clammy.
* Nausea and vomiting are common.
* Pulse may be weak and blood pressure may fall.
* Shortness of breath

Management

Call 999

Allow the patient to rest in the position that feels most comfortable

Give sublingual GTN spray

Aspirin in a single dose of 300 mg orally, crushed or chewed

High flow oxygen may be administered (15 litres per minute) if the patient is cyanosed or conscious level deteriorates

If the patient becomes unresponsive always check for ‘signs of life’ (breathing and circulation) and start CPR

**Epileptic seizure**

Signs and symptoms

* Brief warning or ‘aura’.
* Sudden loss of consciousness, the patient becomes rigid, falls, may give a cry, and becomes cyanosed (tonic phase).
* After a few seconds, there are jerking movements of the limbs; the tongue may be bitten (clonic phase).
* There may be frothing from the mouth and urinary incontinence.
* The seizure typically lasts a few minutes; the patient may then become floppy but remain unconscious.
* After a variable time the patient regains consciousness but may remain confused.

Management

Reduce risks of harm to patient but do not restrain

Give high flow oxygen (15 litres per minute)

After convulsive movements have subsided place the patient in the recovery position and reassess

If the patient remains unresponsive always check for ‘signs of life’ (breathing and circulation) and start CPR if indicated

Check blood glucose level to exclude hypoglycaemia;

If blood glucose <3.0 mmol per litre or hypoglycaemia is clinically suspected, give oral/buccal glucose, or glucagon

It may not always be necessary to seek medical attention or transfer to hospital unless the convulsion was atypical, prolonged (or repeated), or if injury occurred. These signs include;

* Status epilepticus.
* High risk of recurrence.
* First episode.
* Difficulty monitoring the individual’s condition.

Only if seizure is prolonged (over 5 minutes); give midazolam given via the buccal route in a

single dose of 10mg for adults (child 1-5 years 5mg, child 5-10 years 7.5mg, above 10 years 10mg)

**Hypoglycaemia**

Signs and symptoms

* Shaking and trembling.
* Sweating.
* Headache.
* Difficulty in concentration / vagueness.
* Slurring of speech.
* Aggression and confusion.
* Fitting / seizures.
* Unconsciousness.

Management

Measure blood glucose

Conscious; Oral glucose (sugar (sucrose), milk with added sugar, glucose tablets or gel). If necessary this may be repeated in 10 -15 minutes

Unconscious; Glucagon should be given via the IM route (1mg in adults and children >8 years old or >25 kg, 0.5mg if <8 years old or <25 kg)

Re-check blood glucose after 10 minutes to ensure that it has risen to a level of 5.0 mmol per litre or more

If any patient becomes unconscious, always check for ‘signs of life’ (breathing and circulation) and start CPR if indicated

Once conscious, the patient should be given oral glucose, accompanied home if fully recovered and their GP informed

**Syncope**

Signs and symptoms

* Patient feels faint / dizzy / light headed.
* Slow pulse rate.
* Low blood pressure.
* Pallor and sweating.
* Nausea and vomiting.
* Loss of consciousness.

Management

Lay the patient flat

If any patient becomes unresponsive, always check for ‘signs of life’ (breathing, circulation) and start CPR if appropriate

**Adrenal Insufficiency**

Guidance on the management of those patients with known Addison’s disease is

available from the Addison’s Clinical Advisory Panel (http://www.addisons.org.uk/)

**Download Resuscitation Council Guidelines (Revised December 2012)**

http://www.resus.org.uk/pages/MEdental.pdf

## Management of the Anticoagulated patient

Pre-operatively

The risk of significant bleeding in patients on oral anticoagulants and with a stable INR in the therapeutic range 2-4, is low. The risk of thrombosis if anticoagulants are discontinued may be increased. Oral anticoagulants should not be discontinued in the majority of patients requiring out-patient dental treatment.

Individuals in whom the INR is unstable, should be discussed with their anticoagulant management team

In patients receiving long-term anticoagulant therapy and who are stably

anticoagulated on warfarin an INR check 72 hours prior to surgery is recommended.

This allows sufficient time for dose modification if necessary to ensure a safe INR (2-

4) on the day of dental surgery.

The INR should also be checked if performing an inferior alveolar nerve block (IANB)

as there is an anecdotal risk of haematoma and airway compromise. If needed, an

IANB should be given cautiously, using an aspirating syringe, with an INR <3.0.

Peri-operatively

The risk of bleeding may be minimised by the use of oxidised cellulose (Surgicel) or collagen sponges and sutures

Post-operatively

Patients taking warfarin should not be prescribed nonselective NSAIDs and COX-2 inhibitors as analgesics following dental surgery.

Drug interactions

Refer to BNF when prescribing the following to a warfarinised patient;

Amoxicillin, Clindamycin , Erythromycin (and other macrolides), Metronidazole , NSAIDs , Miconazole, Carbamazepine

**Anti Platelet medications**

Common anti-platelet drugs include asprin and clopidogrel. These do not need to be interrupted to perform minor oral surgery. When two anti-platelet drugs are being taken, local haemostatic measures may be prudent post extraction

**Newer medications**

Rivaroxaban and Dabigatran are relatively new oral anticoagulants that interfere with the clotting cascade. They can be prescribed in patients that have had pulmonary embolisms, deep vein thromboses and atrial fibrillation.

Care needs to be exercised when extracting teeth on these patients and it may be prudent to consult a haematologist for advice regarding their management. The overall outcome will be dependent on the patients overall risk to thrombo-embolic episodes.

**Guidelines for the management of patients on oral anticoagulants requiring dental surgery**

British Committee for Standards in Haematology,September 2011

http://www.bcshguidelines.com/documents/WarfarinandentalSurgery\_bjh\_264\_2007.pdf