Commonly Prescribed Drugs in Hospital

Emergencies

**You must know these...**

CARDIAC ARREST = DC shock 150J biphasic, Adrenaline 1mg IV (10ml of 1 in 10,000), Amiodarone 300mg IV (if shockable rhythm)

ANAPHALAXIS = Adrenaline 1mg IM (0.5ml of 1 in 1000), hydrocortisone 200mg IV, Chlorphenamine 10mg IV

SEIZURE = Lorazepam 4mg IV (or if no IV access, Benzodiazepam 10mg PR)

HYPOGLYCAEMIA = 10% glucose 150ml IV or 20% glucose 75ml IV (repeat as needed) or Glucagon 1mg IM (if no IV access)

HYPERKALAEMIA = 10% calcium gluconate 10ml IV over 5 minutes, THEN 10% glucose 250ml IV with 10 units Actrapid insulin added over 30 minutes

BRADYCARDIA = Atropine 500mcg IV (repeat every 3-5 min to maximum of 3mg if needed)

SVT (without adverse signs) = Adenosine 6mg IV (can be followed by 12mg then another 12mg if unsuccessful)

Note: must be bolused and flushed very fast via a large line in the antecubital fossa minimum

VT (without adverse signs) = Amiodarone 300mg IV over 20-60 min

RAPID TRANQUILISATION OF AGITATED PATIENT AT RISK TO SELF/OR OTHERS = Lorazepam 1-2mg PO (or 2-4mg IM) or Haloperidol 1.5-3mg PO (or 5-10mg IM)

Tranquilisation notes: use oral where possible; give half dose in elderly or renal failure; haloperidol is contraindicated in Parkinson’s, Lewy body dementia and alcohol withdrawal

Analgesia

**ANALGESIC LADDER** = 1. Paracetamol. 2. Paracetamol + Codeine ± Ibuprofen. 3. Paracetamol + Opioid ± Ibuprofen

Paracetamol 0.5-1gram PO/IV, PRN 4-6 hourly (max 4 grams) or QDS

Ibuprofen 400mg PO, QDS (CI = gastritis Hx)

Diclofenac 50mg PO, 8-hourly

Co-codamol 30/500 1-2 tablets PO, PRN 4-6 hourly (max 8 tablets) or QDS

Dihydrocodeine 30mg PO, PRN 4-6 hourly (max 120mg) or QDS

Tramadol 50-100mg PO, PRN 4-6 hourly (max 400mg) or QDS

Morphine sulphate oral solution (Oramorph) 10mg/5ml 5-10ml PO, PRN 2 hourly (reduce dosing interval in renal impairment)

Morphine 10mg IV/IM/SC, PRN 4 hourly (max 60mg) (reduce dosing interval in renal impairment)

Morphine sulphate modified release tablets (Zomorph/MST) 10-60mg PO, BD

Morphine PCA 1-5mg IV bolus, 5-10 minute lockout (start a 1mg bolus, 5 minute lockout)

Fentanyl PCA 10-50 micrograms IV bolus, 5-10 minute lockout (start at 10 microgram bolus, 5 minute lockout)

Opioid conversions

Subcutaneous morphine = 2x as strong as oral morphine

Oxycodone = 2x as strong as oral morphine

Fentanyl patch: 24 hour oral morphine dose (in mg) ÷ 3 = hourly fentanyl patch dose (in mcg) (safe in renal impairment i.e. GFR<30)

Buprenorphine patch (hourly rate) = 24 hour oral morphine dose (in mg) + 2.3 = hourly fentanyl patch dose (in mcg)

Subcutaneous alfentanil = 30x as strong as oral morphine (safe in renal impairment i.e. GFR<30)

Concept of background and breakthrough analgesia

For patients with ongoing severe pain, you should prescribe regular ‘background’ (long-acting) analgesia with PRN ‘breakthrough’ (short-acting) analgesia. The initial dose of background analgesia should be equivalent to the average dose of PRN analgesia they are currently requiring over 24 hours. Breakthrough analgesia should be 1/6 the dose of the total background analgesia dose 4-hourly PRN. Example: if a patient has been requiring 60mg oramorph a day, convert them to 30mg MST BD and prescribe 10mg oramorph PRN 4-hourly

Subcutaneous PRN medications in palliative patient (all PRN 1-2 hourly)

Morphine 2.5mg (max 20mg/24h) - for pain and breathlessness (use alternative in renal failure e.g. fentanyl/oxycodone)

Hyoscine butylbromide 20mg (max 120mg/24h) - for secretions (bronchial)

Haloperidol 0.5-1.5mg (max 5mg/24h) - for nausea and vomiting

Midazolam 5mg (max 20mg/24h) - for anxiety and agitation (reduce dose in renal failure)

Subcutaneous syringe driver in palliative patient (all over 24 hours)

Morphine 10-20mg - for pain and breathlessness (use alternative in renal failure e.g. fentanyl/oxycodone)

Hyoscine butylbromide 40-120mg - for bronchial secretions

Haloperidol 2.5-10mg - for confusion without hallucinations (reduce dose in renal failure)

Cyclizine 75-150mg - for nausea and vomiting

Levomepromazine 6.25-100mg - for nausea and vomiting (2nd line)
**Nutrition**

*Fortisip Compact Extra* 125ml PO, BD/TDS/QDS

*Sanatogen A-Z complete tablets* 1 tablet PO, OD

**Constipation**

*Senna* 7.5-15mg PO, ON (stimulant laxative - 1st line for acute and opiate constipation)

*Macrogol oral powder (Movicol)* 1-3 sachets PO, OD/BD/TDS (osmotic laxative – for faecal impaction)

*Ispaghula husk (Fybogel)* 1 sachet PO, BD (bulk forming laxative - 1st line for chronic constipation, elderly patients and pregnant patients)

*Magnesium hydroxide* 30-45ml PO, ON (osmotic laxative – used for post-op patients)

*Glycerol 4g suppository* 1 suppository PR, STAT (stimulant laxative)

*Phosphate enema* 1 enema PR, STAT (osmotic laxative)

**Nausea/Vomiting**

*Cyclizine* 50mg IV/IM/PO, PRN 6-8 hourly (max 150mg)

*Ondansetron* 4mg IV/IM/PO, PRN 4-6 hourly (max 16mg)

*Metoclopramide* 10mg IV/PO TDS (anti-dopaminergic SEs, so avoid if young/Parkinsons/dyskinesias)

**Sleeping tablets**

*Zopiclone* 7.5mg PO (3.75mg if elderly), ON (caution in renal failure)

*Temazepam* 10mg PO, ON (caution in renal failure)

**Wheeze**

*Salbutamol* 2.5-5mg NEB, PRN 4-6hourly (max 20mg)

*Ipratropium bromide* 250-500micrograms NEB, PRN 4-6hourly (max 2mg)

*Prednisolone* 40mg PO, OD

**Correcting electrolytes**

See OSCEstop notes on U&E interpretation for full details

**Hypokalaemia**

Mild (>2.5mmol/L): sando-K 2 tablets TDS x 3/7, or add 20-40mmol/L potassium chloride to each litre of IV fluids

Severe (<2.5mmol/L or ECG changes): 40mmol/L potassium chloride in 1L 0.9% saline over 4-6 hours *(NEVER give >10mmol/h K+ outside ICU)*

**Hyperkalaemia**

1. ECG and cardiac monitoring
2. Calcium gluconate 10ml 10% IV over 5mins – *can be used undiluted in emergencies*
3. Actrapid insulin 10 units in 250ml 10% glucose IV over 30mins
4. Calcium resonium

**Hypocalcaemia**

Mild (1.9mmol/L and asymptomatic): calcium (e.g. sandocal or calceos) 1000mg BD + vitamin D if deficient

Severe (1.9mmol/L or symptomatic): calcium gluconate 10ml 10% IV over 30mins – *should be diluted: 1ml 10% calcium gluconate to 4ml normal saline or 5% dextrose*

**Hypercalcaemia**

Replace fluid deficit with 0.9% saline and keep patient very well hydrated (continuous IV fluids)

If severe (>3.5mmol/L or symptomatic): also bisphosphonate e.g. pamidronate 30/60/90mg IV (one off dose)

**Hypomagnesemia**

PO: magnesium aspartate 1 sachet (10mmol) BD x 3/7

IV: 5grams (20mmol) magnesium in 500ml 0.9% saline over 5 hours

**Hypophosphatemia**

PO: phosphate-sandoz 2 tablets TDS x 3/7

IV: sodium glycerophosphate 10mmol in 500ml 0.9% saline over 12 hours