Commonly Prescribed Drugs in Hospital

Emergencies

You <u>must</u> 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 0.5mg 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 5minutes **<u>THEN</u> 10% glucose** 250ml IV **with 10 units Actrapid insulin added** over 30minutes
BRADYCARDIA= Atropine 500mcg IV (repeat every 3-5min 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 20-60min
RAPID TRANQUILISATION OF AGITATED PATIENT AT RISK TO SELF/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 4grams) 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
Dihydrocodiene 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, 5minute lockout)
Fentanyl PCA 10-50micrograms IV bolus, 5-10 minute lockout (start at 10microgram bolus, 5minute lockout)

<u>Opioid conversions</u>
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 alfentanyl = 30x as strong as oral morphine (safe in renal impairment i.e. GFR<30)

<u>Concept of background and breakthrough analgesia</u>
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

<u>Subcutaneous PRN medications in palliative patient (all PRN 1-2 hourly)</u>
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)

<u>Subcutaneous syringe driver in palliative patient (all over 24 hours)</u>
Morphine 10-20mg - for **pain** and breathlessness (use alternative in renal failure e.g. fentanyl/oxycodone)
Hyoscine butylbromide 40-120mg - for bronchial **secretions**
Midazolam 20-100mg - for **confusion** without hallucinations (reduce dose in renal failure)
Haloperidol 2.5-10mg - for **nausea** and vomiting; **confusion** with hallucinations
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&Es 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