

14 ANTIDOTES & DIAGNOSTIC TESTS

14.01 ANTIDOTES & DETOXIFYING AGENTS

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
Acetylcysteine Inj 200mg/ml, 10ml (Parvolex)	EDL	Paracetamol (Acitaminophen) overdose: IV infusion in D5, initial dose 150mg/kg in 200ml over 15 min, followed by a dose of 50mg/kg in 500ml over 4 hours, than a dose of 100mg/kg in 1000ml over 16 hrs. NOTE: Give within 24 HOURS of ingestion, for its use beyond that time period seek expert advice.
Atropine Sulphate Inj 100ug/ml, 600ug/ml & 1mg/ml	EDL	Reversal of muscarinic effects: IM or IV 2mg (undiluted) every 20-30 min until skin becomes flushed and dry, pupils dilate & tachycardia develop. Control of muscarinic side effects of neostigmine in reversal of competitive neuromuscular block: inject slow IV injection (undiluted) 0.6-1.2mg.
Charcoal Powder (Activated) 300g		Reduction of absorption of poisons that are toxic in small amounts (especially aspirin, carbamazepine, dapsone, phenobarbitone, quinine, and theophylline): orally 50g mixed in 100mls of water initially, then 25-50g given 4 hourly; child < 12 yo give half adult dose. NOTE: Give within 1-2 HOURS of ingestion, or within 4 hours for salicylates/SR drugs.

Cont. next page

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
Flumazenil Inj 0.5mg/ 5ml (Anexate)		<p>Reversal of sedative effects of benzodiazepines in anaesthesia/ ICU: Adult, slow IV 0.2mg (undiluted over 15 sec), then 0.1-0.2mg every 1 min <i>prn</i>; usual 0.3-0.6mg; max total dose 1mg (2mg in intensive care). Same dosing regimen if re sedation occurs (flumazenil has short duration of action), to max 3mg in a one-hour period, or give IV infusion in D5/NS/ LR via a large vein 0.1-0.4mg/hr according to level of arousal.</p> <p>Child, slow IV dose 10ug/kg (max 0.2mg) over 15 sec, repeat at one-min intervals up to max 5 doses; or IV infusion 5-10ug/kg/hr.</p>
Naloxone HCl Inj 0.4mg/ml, 5ml (Narcan)	EDL	<p>Overdosage with opioids: Adult IV bolus 0.8-2mg every 2-3 min to max 10mg if respiratory function does not improve (then question diagnosis); child dose 10ug/kg, then subsequent dose of 100ug/kg if no response.</p> <p>Reversal of opioid-induced respiratory depression: Adult IV 1.5-3ug/kg or 100-200ug; if needed give incremental doses of 100ug every 2 min; further doses IM after 1-2 hr <i>prn</i>, titrate to response, be careful to avoid interference with control of post-op pain. Child, IV 5-10ug every 2-3 min until adequate ventilation and alertness without significant pain obtained. If needed dose may be repeated every 1-2 hr.</p> <p>For IV injection, give undiluted or diluted with WFI for a convenient volume. For IV infusion add 2mg (5ml of 0.4mg/ml solution) to 500ml of D5/NS to give 4ug/ml solution.</p>

Cont. next page

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
Protamine Sulphate Inj 10mg/ml, 5ml	EDL	Slow IV Inj (undiluted or dilute in D5/NS) over 10 min, 1mg neutralises 80-100 units heparin when given within 15 min; if longer, less protamine needed (heparin excretion rapid), max 50mg total dose.

COMMENT/CAUTIONS:

- It is often impossible to establish with certainty the identity of the poison and the dosage, but few poisons have specific antidotes and most patients must be treated symptomatically.
- For further info see TOXBASE, the primary clinical toxicology database of the National Poisons Information Service in the UK, at www.spib.axl.co.uk.

14.02 DIAGNOSTIC AIDS & TEST PREPARATIONS

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
*Barium Sulphate 30-200% w/v Oral/Rectal Solution [Radiocontrast media]	EDL	For examination of the gastrointestinal tract. Do not use if risk of obstruction/perforation. Ensure adequate hydration after procedure to prevent severe constipation. See manufacturer's leaflet for dose details.
*Fluorescein Disodium 0.4moles in H₂O Medium, Strips for Ophthalmic Use (Fluorescite)	MSL	For diagnosis of corneal epithelial defects. For single use only, externally, applied to the conjunctiva or conjunctival sac where tears will dissolve the strip, then leave in contact for 5 seconds. Do not use on damaged eye tissue, and do not touch the fluorescein-coated tissue. See product leaflet for details.

Cont. next page

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
<p>*Diatrizoates, amidotrizoate sodium 100mg + meglumine 660mg per ml Oral/Rectal Solution (Gastrografin)</p> <p>[Radiocontrast media – iodinated] (Iodine content 370mg/ml)</p> <p>NOTE: Anaphylaxis risk, observe patients for 30-60 minutes after administration, ensure presence of emergency equipment.</p>	EDL	<p>For examination of gastrointestinal tract. May be used in patients with risk of obstruction/perforation. Ensure adequate hydration after procedure to prevent severe constipation. Avoid in manifest hyperthyroidism or iodine sensitivity.</p> <p>Oral, adult & child > 10 yo, 60ml for visualisation of the stomach, max 100ml; child < 10yo, 15-30ml; dilute with equal volume of water if used in child, elderly or cachectic patients. CT scan, 1-1.5 litre of 3% solution (30ml gastrografin/1L water).</p> <p>Rectal, adult, dilute gastrografin with 3-4 times its volume of water, usually not more than 500ml diluted solution needed; child > 5yo, dilute with 5 times its volume of water.</p> <p>With barium sulphate: adult, add 30ml gastrografin to usual barium dose; child 5-10yo, add 10ml; child > 5yo, add 2-5ml.</p> <p>See product leaflet for dose details.</p>
<p>*Iohexol 240mg I/ml (Omnipaque)</p> <p>[Radiocontrast media – iodinated] (Iodine content 240mg/ml)</p> <p>NOTE: Anaphylaxis risk, observe patients for 30-60 minutes after administration, ensure presence of emergency equipment.</p>	EDL	<p>X-ray & CT scan contrast medium. Ensure adequate hydration after procedure to prevent constipation. Avoid in manifest hyperthyroidism or iodine sensitivity.</p> <p>IV, intra-arterial, intrathecal, oral, rectal use.</p> <p>See manufacturer's leaflet for dose details.</p>

Cont. next page

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
Methylene Blue Inj 1%		As dye in diagnostic procedures such as fistula detection and for delineation of certain body tissues during surgery.
*Tuberculin PPD Inj, Purified 100iu/ml (Mantoux test, Monotest)		Routine Mantoux tuberculosis test: 0.1ml intradermally, preferably at the flexor surface of the forearm, and examined 48-72hrs later. See Micromedex for details.

COMMENT/CAUTIONS:

- **Radiocontrast Media:** Anaphylactoid reactions to iodinated radiocontrast media are more common with high osmolality compounds. Patients with a history of asthma or allergy, drug hypersensitivity, adrenal suppression, heart disease, previous reaction to contrast media, and those receiving beta-blockers are at increased risk. Non-ionic media are preferred for these patients and beta-blockers should be discontinued if possible.
- **Tuberculin/Mantoux Test:** Bacillus Calmette-Guérin (BCG) vaccinated individuals will usually show a positive reaction to tuberculin test if given within 6-12 weeks after BCG vaccination; a few years after, reaction to tuberculin tests may be either positive or negative; a positive reaction to tuberculin PPD years after BCG vaccination suggests tuberculous infection.
- Opened vials of tuberculin PPD should be discarded after 1 month of use.