Succimer / 2,3-Dimercaptosuccinic Acid / DMSA

Succimer is an oral metal chelator for the treatment of lead, arsenic and mercury poisoning

Indications

- *Clinical features consistent with lead, arsenic or mercury toxicity AND an elevated blood/urine concentration consistent with toxicity (see separate guidelines for specific indications)*
- *Succimer may have a role in at-risk asymptomatic patients with confirmed exposure to lead, arsenic, or mercury (e.g. paediatric lead exposures - discuss with a clinical toxicologist)*

Contraindications

- Known hypersensitivity
- The metal-succimer complex is eliminated via the renal tract. Consider dose adjustment with renal impairment (eGFR < 45, discuss with clinical toxicologist)

Presentation

Succimer 100 or 200 mg capsules (Special Access Scheme)

Dose and administration (discuss use with a clinical toxicologist)

Adult: 10 mg/kg tds for 5 days, followed by 10 mg/kg bd for 14 days (maximum 500 mg per dose)

Paediatric dosing by weight:

8 – 15 kg : 100 mg tds for 5 days, followed by 100 mg bd for 14 days

16 – 23 kg : 200 mg tds for 5 days, followed by 200 mg bd for 14 days

24 - 34 kg : 300 mg tds for 5 days, followed by 300 mg bd for 14 days

35 - 44 kg : 400 mg tds for 5 days, followed by 400 mg bd for 14 days

> 45 kg : 500 mg tds for 5 days, followed by 500 mg bd for 14 days (maximum 500 mg per dose)

**Repeat liver function tests and FBC after initial 5 days of chelation therapy*

**Repeated courses may be needed depending on clinical features, laboratory investigations, age and co-morbidities*

Therapeutic Endpoint:

- In general: patient asymptomatic AND laboratory investigations below concentrations indicating chelation Rx (metal concentrations should be measured 10 days after completion of chelation therapy to allow redistribution)

Adverse effects:

- GI: Nausea, vomiting, diarrhoea, flatus, metallic taste (10-20%), mild transient transaminase rise
- Others: rash/urticaria (4%), fever, reversible neutropenia

Pregnancy: FDA pregnancy category C. Administration is only recommended in circumstances where potential benefit justifies the potential risk to the fetus (discuss with a clinical toxicologist).