Single-Dose Activated Charcoal (SDAC)

Although oral SDAC is most effective if given within 2 hours, it can be effective many hours post ingestion. It is not routinely indicated in most poisonings.

Indications

In general, drugs / substances exposures where:

- Drug / substance is adsorbed by Activated Charcoal (AC)
- Serious toxicity is anticipated
- Ingestion within 2 hours (4 hours if modified release preps, anticholinergics/ massive ingestions)

Benefits of SDAC administration must outweigh risks

Contraindications

- Non-toxic ingestions / those not expected to produce clinically significant toxicity
- Unprotected airway (decreased GCS, uncooperative)
- Risk of imminent seizures/decreased conscious state
- Uncontrolled vomiting

Ileus is not a contra-indication to SDAC

- **Drugs / substances not adsorbed by AC**
  - Metals (Fe, Pb, As, Hg, Li, K, Mg, Ca)
  - Toxic alcohols (methanol, ethylene glycol, isopropanol)
  - Corrosives (acids, alkalis)
  - Hydrocarbons (petrol, essential oils, kerosene)
  - Other (cyanide, organophosphates)

Presentation

There is no data to support the use of AC in sorbitol or other cathartic agent over AC in water.

Dose & Administration (*SHAKE THE BOTTLE prior to administration)

- **Adults**: 50 g
- **Children**: 1 g/kg (max 50 g) – mixed with ice-cream or cordial improves palatability. Use opaque, decorative cup with straw. **Administration of AC in paediatrics is seldom indicated and nasogastric administration is only indicated in life-threatening exposures.**
- **Intubated patient**: via oro-gastric or naso-gastric tube AFTER placement confirmed with CXR

If patient requires SDAC but has an unprotected airway, secure airway first via intubation.

Only on rare occasions is intubation required specifically for SDAC administration (discuss with clinical toxicologist)

Pregnancy & Lactation: AC administration should be administered if indicated

NOTE: - AC may impair absorption of orally administrated therapeutic agents

See separate guideline for multi-dose AC (MDAC)