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 / exposures where:

- Drug is bound by Activated Charcoal (AC)
- Serious toxicity is anticipated
- Ingestion within 2 hours (4 hours if modified release preparations, anticholinergic agents or 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
- Active vomiting
- Agents not bound to 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

 $\pmb{Adults}{:}\ 50\ g$

Children: 1 g/kg (max 50 g) – mixed with ice-cream or cordial improves palatability. Use opaque, decorative cup with straw.

Intubated patient: via oral 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 is acceptable to use if indicated

Adverse Effects

- Vomiting (20%)
- Impaired absorption of orally administrated therapeutic agents
- Ileus is not a contra-indication to SDAC

See separate guideline for multi-dose AC (MDAC)