Medicines Protocol
ACTIVATED CHARCOAL

Protocol Details

<table>
<thead>
<tr>
<th>Version</th>
<th>3.0</th>
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<tbody>
<tr>
<td>Legal category</td>
<td>POM</td>
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</table>
| Staff grades  | ✓ Registered Paramedic  
|              | ✓ Registered Nurse  
|              | ✓ Specialist Paramedic (Urgent and Emergency Care)  
|              | ✓ Specialist Nurse (Urgent and Emergency Care)  
|              | ✓ Nurse Practitioner  
|              | ☐ Advanced Technician/Ambulance Practitioner |
| Approved by  | Medicines Management Group       |
| Date issued  | 29/04/2015          |
| Review date  | 28/04/2017          |
| Clinical Publication Category | PROTOCOL (AMBER) - Deviation permissible; if authorised by Senior Clinician On-call. |

Clinical Requirements

Continuing education

- The clinician is responsible for keeping him/herself aware of any changes to the recommendations for the medicine listed. It is the responsibility of the individual to keep up-to-date with continued professional development and to work within the limitations of their own individual scope of practice.

Clinical Situation

Clinical situation

- The emergency treatment of acute oral poisoning and oral drug overdose.

Inclusion criteria

- Adults and children aged 1 and over who have ingested toxins less than 1 hour before attendance by an ambulance clinician.
- Adults and children, irrespective of time of ingestion, who have ingested toxins and where the Toxbase or the National Poisons Information Service (0844 8920111) have been contacted and advised the administration of activated charcoal. NB Toxbase and National
Poisons Service advice cannot overrule exclusion criteria except in relation to time.

### Exclusion criteria
- Children under 1 year.
- Patients presenting to the ambulance clinician more than 1 hour since ingestion of toxin.
- Administration not advised following communication from Toxbase/NPIS
- GCS less than 15, or likely to deteriorate below 15, whilst on scene or en-route to hospital (this product is contraindicated in patients who are not fully conscious).
- Patients who are vomiting.
- Patients with reduced gastro-intestinal motility (with a risk of obstruction) i.e. patients taking opioid medication or patients who have recently had abdominal surgery.
- Poisoning know to be due to the ingestion of:
  - Cyanide
  - Petroleum distillates
  - Metal salts including salts of lithium and iron
  - Ethanol, methanol, ethylene glycol, iron salts, sodium chloride, lead boric acid, other mineral acid
  - Malathion
  - Corrosive substances (limited usefulness and hinders the visualisation of oesophageal burns or erosions

### Cautions
- Precautions should be taken to prevent aspiration, especially in small children.
- Activated charcoal will reduce the effectiveness of other antidotes.
- The presence of co-ingested alcohol together with a medication overdose does not preclude the administration of activated charcoal to adsorb the medication overdose, as long as the alcohol consumed has not reduced the patient's GCS below 15 and is not likely to do so prior to arrival at hospital.

### Side effects
- Black stools.
- Intestinal obstruction (blockage of digestive system)
- Bezoar formation (ball of material in the stomach that is not passed out).
- Intestinal perforation (rare, but can occur after several treatments).

### Action if excluded
- Convey patient to ED as soon as possible

### Action if patient declines
- Document refusal on patient clinical record.
- Convey patient to ED as soon as possible.
## Description of Treatment

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<th>Description of Treatment</th>
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<tr>
<td><strong>Generic name</strong></td>
<td>• Activated charcoal</td>
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<tr>
<td><strong>Presentation</strong></td>
<td>• 50g suspension of charcoal in 250ml of distilled water.</td>
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<td><strong>Route</strong></td>
<td>• Oral</td>
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| **Dose**                 | • **Adult**: Single dose: 250ml (equivalent to 50g of activated charcoal) as soon as possible after ingestion or suspected ingestion of the potential poison.  
                          | • **Children**: Children aged 1 year to under 12 years - 125ml (equivalent to 25g of activated charcoal or half of the contents of one bottle) unless a large quantity of intoxicant has been ingested, and where there is a risk to life. In these circumstances, the administration of the full 50g dose is indicated.  
                          | • May be mixed with soft drinks or fruit juice to mask the flavour. However, ice-cream or other foods should not be used as a vehicle for the administration of activated charcoal as they reduce the adsorptive capacity of the activated charcoal. |
| **Method**               | ☑ Administration ☐ Supply |
| **Duration of treatment**| • Single episode of care |

## Follow Up

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| **Referral arrangements and safety netting** | • Advise receiving unit that patient has been given activated charcoal in case other oral antidotes are to be given.  
                          | • Patient must be admitted to hospital. |
| **Advice to patients** | • Advise patient of the potential side-effects and the need to alert the ambulance clinician if they begin to feel nauseous or think they are about to vomit. |
| **Records** | • Complete patient clinical record. |
| **References** | • British National Formulary (BNF) 68 September 2014 to March 2015 |
