activated charcoal

**Indications**
Acute management of many oral poisonings following emesis/lavage.

**Action**
Binds drugs and chemicals in the GI tract. Therapeutic Effects: Decreased intestinal absorption of drugs or chemicals in the overdose situation.

**Pharmacokinetics**
Absorption: None.
Distribution: None.
Metabolism and Excretion: Excreted unchanged in the feces.
Half-life: Unknown.

**TIME/ACTION PROFILE (antidote)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>unknown</td>
<td>4–12 hr</td>
</tr>
</tbody>
</table>

**Contraindications/Precautions**

**Contraindicated in:** No known contraindications.

**Use Cautiously in:** Poisonings due to cyanide, corrosives, ethanol, methanol, petroleum distillates, organic solvents, mineral acids, or iron; Endoscopic examination (observation will be obscured).

**Adverse Reactions/Side Effects**

- **GI:** black stools, constipation, diarrhea, vomiting.

**Interactions**

- **Drug-Drug:** Other drugs including ipecac syrup and laxatives will be adsorbed by charcoal and as a result will not be systemically absorbed from the GI tract.

**Route/Dosage**

**Antidote**

| PO (Adults) | 25–100 g (may be repeated q 4–6 hr). |
| PO (Children 1–12 yr) | 25–50 g (may be repeated q 4–6 hr). |
| PO (Children <1 yr) | 1 g/kg (may be repeated q 4–6 hr). |

**NURSING IMPLICATIONS**

- **Assessment:**
  - Assess neurologic status; administer only if patient is alert (unless airway is protected).
  - Inquire as to the type of drug or poison and time of ingestion.
  - Consult reference, poison control center, or physician for symptoms of toxicity of ingested agent(s).
  - Monitor BP, pulse, respiratory and neurologic status, and urine output as indicated by toxicity of agent(s). Notify physician of symptoms or permit worsens.

- **Lab Test Considerations:** Serial tests may help assess absorption of essential nutrients. This may result in decreased mineral or electrolyte levels.

- **Potential Nursing Diagnoses**
  - Risk for self-directed violence (Indications)
  - Risk for injury (Indications)

- **Implementation**
  - **Treatment of Poisoning:** Activated charcoal is most effective if administered within 30 min of ingestion of drug or poison. Dosage may be repeated for drugs subjected to enterohepatic elimination to minimize further absorption.
  - If syrup of ipecac is used, administer ipecac first and wait until emesis occurs before administering activated charcoal.
  - PO: Mix dose in 6–8 oz water; administer as a slurry (unless using suspension with or without sorbitol). Do not administer with milk products (milk, ice cream, or sherbet). May need to be diluted with additional water to be thin enough to administer through a nasogastric tube.

**Classification**
Therapeutic: adsorbents

**Pregnancy Category:** C
Shake oral suspension well before administration.
- Rapid ingestion may cause vomiting. If vomiting occurs shortly after administering dose, confer with physician about repeating dose.
- Do not administer other oral drugs for 2 hr before or after administering activated charcoal.
- Stomach is constipating; physician may order a laxative to speed removal of the drug.

Patient/Family Teaching
- Inform patient that stools will turn black.

Poisoning
- When counseling, discuss methods of prevention, need to confer with poison control center, physician, or emergency department before administering, and need to bring ingested substance to emergency department for identification.

Evaluation/Desired Outcomes
- Prevention or resolution of toxic effects of ingested agent.

Why was this drug prescribed for your patient?