Clinical Practice Guidelines: Other/Disk battery ingestion

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<tr>
<th>Date</th>
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<td>Purpose</td>
<td>To ensure a consistent approach to the management of a patient with Disc battery ingestion.</td>
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<td>Scope</td>
<td>Applies to all QAS clinical staff.</td>
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Disc battery ingestion

Disc batteries are small, coin shaped, single cell batteries most commonly used in residential households to power small electrical devices (e.g. hearing aids, watches, children’s toys and musical greeting cards).

All suspected disc battery ingestions should be considered a medical emergency. Mucosal trauma will commence in as little as 2 hours and if untreated, may lead life-threatening gastrointestinal bleeding or death secondary to major vascular injury. [1,2,3]

Despite assurances from the parents that no disc batteries were available and/or the child’s denial of disc battery ingestion, it is essential that paramedics consider disc battery ingestion as a differential diagnosis in any child presenting with choking, hematemesis, discoloured or bloody/black stools.

**Clinical features**

**High risk features for airway compromise:**
Choking or gagging (sometimes overheard rather than directly observed)

- hoarse voice
- dyspnoea
- stridor
- drooling
- painful swallowing
- vomiting

**Common symptoms in cases of delayed disc battery ingestion:** [1,2]

- chest pain
- abdominal pain
- unexplained gastrointestinal bleeding (melena)
- bloody/black stools
- regurgitation or drooling
- vomiting without fever or diarrhoea
- haemoptysis
- hematemesis
- prolonged food refusal/ inability to swallow solids
**Risk assessment**

- Any disc battery with residual voltage can cause significant tissue damage.
- 12% of children who ingested a 20 mm disc battery suffered severe or fatal injuries[3]
- Peak age for disc battery related injury is 1-5-years; younger cases having been reported in literature (possibly fed batteries by siblings)[1]
- Signs and symptoms are non-specific; history provided at the patient’s residence may alert officers to the possibility of disc battery ingestion
- Denial of disc battery ingestion in a child of any age cannot exclude it[6]
- Most fatal/severe cases are associated with occult ingestion of a battery (caregivers are often unaware that the battery is missing/has been ingested). In these situations, there may be no history suggesting battery related injury.
- Transport suspected disc battery ingestion cases to facility that has capacity for x-ray.

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**CPG: Paramedic Safety**  
**CPG: Standard Cares**

- Parent/Child reported history of:
  - disc battery exposure
  - choking
  - haemoptysis/hematemesis

- Attempt to identify type of battery, take product packaging to hospital if possible

- Nil by mouth

**Consider:**

- IV access
- Analgesia
- Antiemetic
- IV fluid

**Transport to hospital**  
**Pre-notify as appropriate**

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**Note:** Officers are only to perform procedures for which they have received specific training and authorisation by the QAS.