Snail and slug ingestion - Prophylaxis against *Angiostrongylus cantonensis* infection

**Purpose**

This guideline outlines recommendations for prophylactic anti-parasitic treatment for patients presenting with a history of snail or slug ingestion.

**Scope**

This guideline is applicable for all paediatric cases of snail and slug ingestion being managed in Queensland.

**Related documents**

**Procedures, Guidelines, Protocols**

- CHQ-PROC-01036 Antimicrobial: Prescribing and Management
- CHQ Antimicrobial Restriction list

**Guideline**

**Background**

- *Angiostrongylus cantonensis*, the Rat Lung Worm is a parasitic nematode present in a number of regions in the world, including Australia.
- Snails and slugs host larvae that then infect rats.
- Humans can become infected with larvae by ingesting snails or slugs; these larvae migrate to the brain causing eosinophilic meningitis / neuroangiostrongyliasis.
• Neuroangiostrongyliasis severity varies depending on number of larvae ingested; it can be mild but can be progressive, and can lead to disability or death

• Early prophylactic treatment aims to kill the parasite before or as it enters the central nervous system (CNS) and is likely effective if given up to two weeks post-ingestion.

• Giving anti-helminthic treatment after the larvae have entered and multiplied in the CNS can theoretically worsen the illness, and should be avoided.

• Albendazole is the preferred anti-helminthic because it has better systemic absorption than other drugs in its class.

• There are gaps in evidence for albendazole dosing as prophylaxis. The dosing recommendations in this guideline are based on expert opinion and extrapolations from clinical studies that are limited to the treatment of eosinophilic meningitis caused by Angiostrongylus cantonensis.

Recommendation
If a child has been observed, or is strongly suspected to have ingested part or all of a snail or slug, early treatment (ideally within 7 days of exposure, but not beyond 14 days of exposure) with:

• Oral Albendazole 20 mg/kg (maximum 400 mg/dose) once daily for 7 days.
  – Infants and children older than 6 months of age only.
  – For ease of administration, round calculated dose to the nearest multiple of 100 mg.
  – Tablets can be taken whole, chewed or crushed.
  – Doses can / should be taken with food (increases systemic absorption).

• Albendazole (Zentel™ 200 mg available as chewable scored tablet) is available on the Queensland Hospitals List of approved medicines. Availability from community pharmacies may vary.

Consultation
Key stakeholders who reviewed this version:
• Paediatric Infection Specialists, Infection Management Prevention Service
• Director, Infection Management Prevention Service, Immunology and Rheumatology
• Pharmacist Consultant, Queensland Poisons Information Centre
• Clinical Pharmacist Lead, Antimicrobial Stewardship
• Chair of CHQ Medicines Advisory Committee – endorsed 26/07/2021

References and suggested reading


Guideline revision and approval history

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<td>Dr Vikram Vaska (IMPS) Nicolette Graham (AMS)</td>
<td>CHQ Medicines Advisory Committee</td>
<td>Executive Director Medical Services</td>
</tr>
<tr>
<td>2.0 09/04/2019</td>
<td>Infection Specialists (Infection Management and Prevention Service, CHQ) Antimicrobial Stewardship Pharmacist (CHQ)</td>
<td>CHQ Medicines Advisory Committee</td>
<td>Executive Director Clinical Services (QCH)</td>
</tr>
<tr>
<td>3.0 23/07/2021</td>
<td>Infection Specialists (Infection Management and Prevention Service) Clinical Pharmacist Lead, Antimicrobial Stewardship</td>
<td>Director, Infection Management and Prevention Service, Immunology and Rheumatology</td>
<td>Divisional Director Medicine</td>
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Snail, slug, ingestion, paediatric, Angiostrongylus cantonensis, rat lung worm, albendazole, eosinophilic meningitis, antihelminthic agent, prophylaxis, 01219

Accreditation references
NSQHS Standards (1-8): 3 Preventing and Controlling Healthcare Associated Infections, 4 Medication Safety