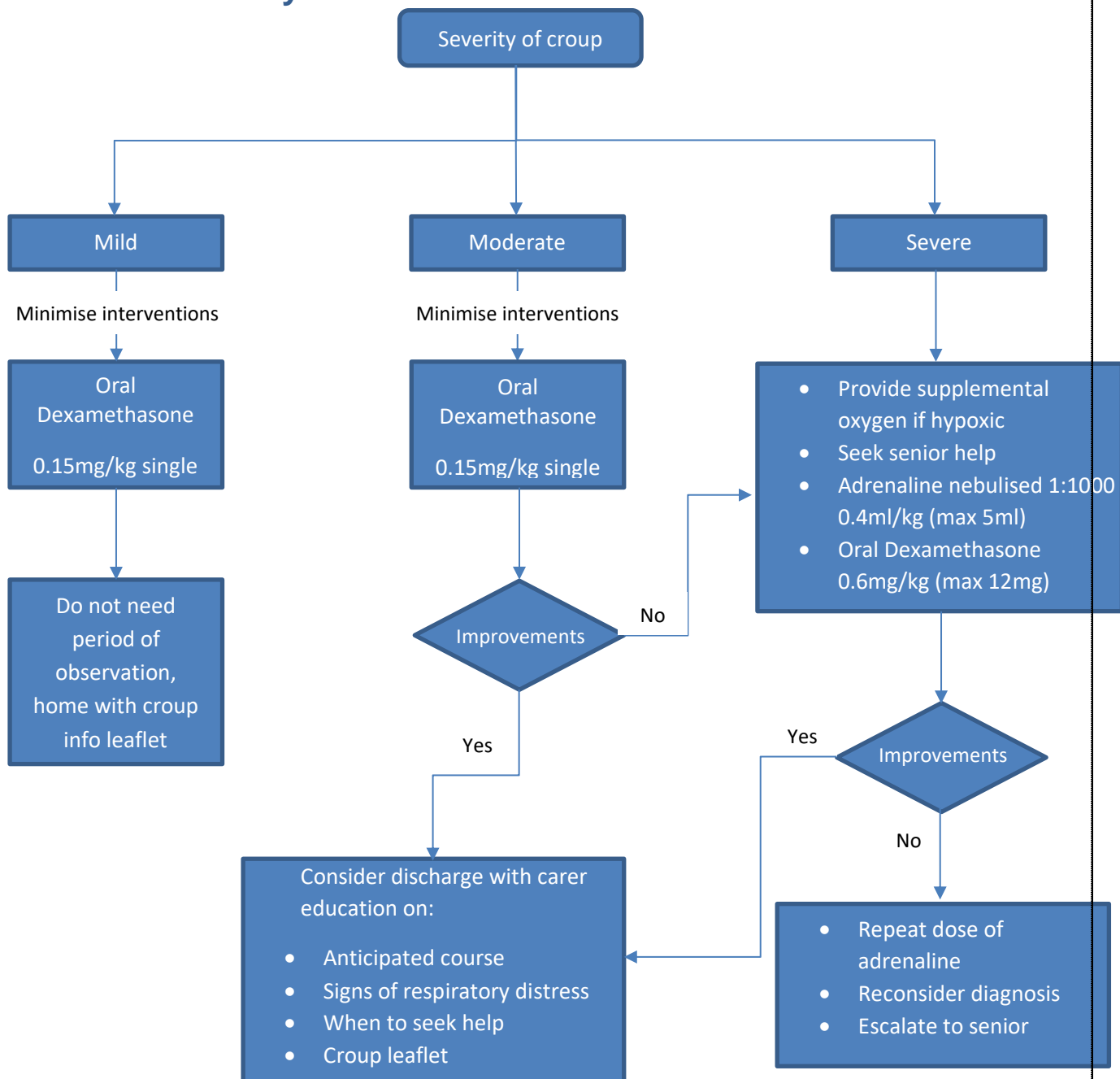


CROUP TREATMENT PROTOCOL FOR PAEDIATRIC PATIENTS



TARGET AUDIENCE	secondary care
PATIENT GROUP	Paediatric patients who have croup within secondary care

Clinical Summary



Croup treatment protocol for paediatric patients

Croup Treatment Protocol for Paediatric Patients

Background

Croup (laryngotracheobronchitis) is a common respiratory disease that typically occurs in children aged between 6 months and 3 years.

- Croup is inflammation of the upper airway, larynx and trachea
- It is most commonly caused by a virus, typically parainfluenza virus types 1 or 3

Examination

Children with croup should have minimal examination so as not to upset the child further.

Croup is a clinical diagnosis, characterized by:

- The sudden onset of a seal-like barking cough often accompanied by
 - Voice hoarseness
 - Inspiratory stridor
 - Respiratory distress with increased work of breathing
- Often worse at night and increases with agitation
- May have associated widespread wheeze
- Other signs of respiratory distress
- May have fever but should not appear septic/toxic

Risk factors for severe croup include:

- Pre-existing narrowing of the upper airways
- Previous admissions with severe croup
- Subglottic stenosis
- Down syndrome
- Chronic lung disease, congenital heart disease, neuromuscular disorders, immunodeficiency

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Differential Diagnosis

Other causes of acute upper airway obstruction include epiglottitis, retropharyngeal abscess, peritonsillar abscess, bacterial tracheitis, foreign bodies and anaphylaxis.

- Epiglottitis
 - Rare now due to universal immunization to Hib
 - Consider epiglottitis in the septic looking child with upper airway obstruction
- Retropharyngeal abscess
 - Consider retropharyngeal abscess in the child with upper airway obstruction, neck swelling, and restricted neck movements
 - Lateral neck x-ray can be considered but should not be performed in children with severe airway obstruction or hypoxia.
- Foreign bodies
 - Always consider presence of foreign bodies if the history suggests so, e.g. sudden onset acute respiratory distress and stridor in a child who had just choked on an item
- Anaphylaxis
 - Sudden onset at any age with urticaria and tongue, lips and facial swelling

Assessment of severity

	Mild	Moderate	Severe
Behaviour	Normal	Intermittent mild agitation	Increasing agitation, drowsiness
Stridor*	No stridor, or only when active or upset	Intermittent stridor at rest	Persistent stridor at rest
Respiratory Rate	Normal	Increased respiratory rate	Marked increase or decrease
Accessory Muscle Use	None or minimal	Moderate chest wall retraction	Marked chest wall retraction
Oxygen saturations**			Hypoxia is a late sign which indicates life-threatening croup

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Management

No investigations are needed in croup
Minimal handling to avoid worsening symptoms
Keep children with carers to minimise distress
Follow treatment flow chart

Consider discharge when

- Stridor free at rest and carer educated on:
 - anticipated course of croup
 - Signs of respiratory distress
 - When to seek help
- Carer supplied croup information leaflet
- <http://firstport2/resources/patient-info-leaflets/Documents/A4-PIL.CROUPL.59967.L.pdf>

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References/Evidence

<https://bnfc.nice.org.uk/treatment-summaries/croup/>

<https://www.clinicalProtocols.scot.nhs.uk/nhsggc-Protocols/nhsggc-Protocols/emergency-medicine/croup/>

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[Glucocorticoids for croup in children - Gates, A - 2018 | Cochrane Library](#)

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Appendices

1. Governance information for Guidance document

Lead Author(s):	Lynsay McAulay, Senior Clinical Pharmacist
Endorsing Body:	ADTC
Version Number:	1
Approval date	Aug 23
Review Date:	June 26
Responsible Person (if different from lead author)	

CONSULTATION AND DISTRIBUTION RECORD	
Contributing Author / Authors	Dr Padma Rajagopal, Consultant Paediatrician
Consultation Process / Stakeholders:	Dr Adrienne Sullivan, Consultant Paediatrician
Distribution	

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CHANGE RECORD			
Date	Lead Author	Change	Version No.
13/7/23	Lynsay McAulay	2 nd copy of flow chart removed and link to croup patient information leaflet included	1
			2
			3
			4
			5

2. You can include additional appendices with complimentary information that doesn't fit into the main text of your Protocol, but is crucial and supports its understanding.

e.g. supporting documents for implementation of Protocol, patient information, specific monitoring requirements for secondary and primary care clinicians, dosing regimen/considerations according to weight and/or creatinine clearance

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