IAEM Clinical Guideline

Guideline for the Emergency Management of Children Presenting with Acute Onset Torticollis

Version 1.1

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DISCLAIMER

IAEM recognises that patients, their situations, Emergency Departments and staff all vary. These guidelines cannot cover all clinical scenarios. The ultimate responsibility for the interpretation and application of these guidelines, the use of current information and a patient's overall care and wellbeing resides with the treating clinician.

Revision History

Date	Version	Section	Summary of changes	Author
April 2021	V1.0	All	Final version	JA/CB/JR/ PK
September 2024	V1.1	All Front cover Contents	Updated formatting Added guideline referencing information Added table of contents	C. Briant C. Briant C. Briant

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GLOSSARY OF TERMS

C spine	Cervical Spine
NICE	National Institute for Health and Care Excellence
URTI	Upper Respiratory Tract Infection
CNS	Central Nervous System
ROM	Range of Movement
ENT	Ear, Nose and Throat
FBC	Full Blood Count
CRP	C-reactive Protein
XR	X-ray
CT	Computed Tomography
PEM	Paediatric Emergency Medicine
PO	Per Os – taken orally
SCM	Sternocleidomastoid
CN	Cranial Nerve

Guideline for the emergency management of children presenting with acute onset torticollis

INTRODUCTION

Torticollis or “wryneck” refers to lateral twisting of the neck that causes the head to tilt to one side with the chin turned to the opposite side. It is a non-specific sign with a large spectrum of aetiologies[1].

PARAMETERS

Target audience:

Clinical staff in the paediatric emergency department assessing and managing patients who present with acute onset torticollis.

Patient population:

Patients between 3 months and 16 years presenting to the emergency department with acute onset torticollis.

Exclusion criteria:

- Chronic/congenital torticollis.
- Babies with sternocleidomastoid pseudo-tumour.
- Children with co-morbidities.

AIMS

To provide an evidenced based guide to assist in the emergency department management of children presenting with acute onset torticollis.

Torticollis

History

Red flags to look for in the history include;

- Any history of **trauma?** If yes, follow a C Spine guideline (e.g. NICE guideline for spinal injury) and refer for orthopaedic opinion.
- **Infective**: Recent fever, recent diagnosis of tonsillitis/pharyngitis/URTI symptoms, irritability, dysphagia, drooling, odynophagia[2].
- Any recent **medications** - has the patient received any medications associated with acute dystonic reactions such as metoclopramide?
- **CNS symptoms**: Headache, strabismus, diplopia

Time course: Uncomplicated acute muscular torticollis should resolve within 7 - 10 days.

Examination

1. Assess for midline tenderness, palpate the neck throughout and attempt active ROM (i.e. ask the patient to move their neck).
2. Assess for cervical lymphadenopathy / lymphadenitis (tender fluctuant mass in area of lymphadenopathy).
3. Look for disproportionate irritability and/or drooling in context of fever +/- lymphadenopathy. Consider Grisel's' syndrome (retropharyngeal abscess and associated atlantoaxial rotatory fixation). Location of tenderness may assist with diagnosis, however deep pathology (e.g. infection) may have no external signs.
4. Neurological examination- full neurological exam should be performed, looking for any focal abnormalities, with a specific focus on cranial nerves and upper limb exam.
5. ENT examination including lymph nodes, respiratory distress, stridor and/or

tachypnoea.

6. Eye examination: Nystagmus may suggest Spasmus Nutans (triad of nystagmus, head bobbing and torticollis).

Investigations

- **The majority of patients require no investigations**.
- If symptoms suggestive of infection: FBC, CRP and Blood Cultures.
- Radiology:
    - Lateral neck XR if suspicious for retropharyngeal abscess.
    - Cervical Spine XR: In cases of trauma, or if there is cervical spine tenderness, severe pain, persistent symptoms (≥1 week), limited ROM
    - Ultrasound: if there is a palpable mass/collection.
    - CT may be appropriate in specific cases, e.g. suspicion of atlanto-axial rotary displacement/ retropharyngeal abscess. Always discuss with EM consultant prior to ordering CT.

Management

Management depends on suspected cause:

1. General measure like analgesia or anti-inflammatory medications may be effective (e.g. ibuprofen 10mg/kg PO, 400mg max dose).
2. Diazepam can be effective with some cases of spasm of the SCM (1-4yrs: 2.5mg PO, 5-16yrs: 5mg PO)[3].
3. Heat packs and massage may provide symptomatic relief in cases of muscular spasm causing torticollis.
4. **Infectious causes**: Initiate appropriate IV antibiotic therapy as per antibiotic guidelines and admit under medical team.

5. **Dystonic reactions**: Procyclidine (<2yrs: 0.5-2mg IM/PO, 2-10yrs: 2-5mg IM/PO, >10yrs: 5-10mg IM/PO)[3].
6. A small number of children will require specialist referral.
    a. **Refer to ENT** early if a retropharyngeal or parapharyngeal abscess is suspected.
    b. **Refer to orthopaedics** if any evidence of mal-alignment or instability on clinical or radiological assessment. Children with hyperlaxity and new torticollis (e.g. Elhers-Danlos, Trisomy 21) require orthopaedic review.
    c. **Refer to Ophthalmology for patients with vision problems**: e.g. Suspected CN palsy, new strabismus etc.

REFERENCES

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