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INTRODUCTION

Acute dystonic reactions are reversible extrapyramidal effects that can be induced by a variety of medications. It is characterized by intermittent spasmodic or sustained involuntary contractions of one or more muscles. Occasionally, it involves the larynx and leads to imminent respiratory arrest which required immediate treatment. Prochlorperazine maleate is a phenothiazine drug commonly used as antiemetics, which was thought to induce acute dystonic reaction in a pediatric patient.

CASE REPORT

8-year-old boy presented with complaint of dizziness.

- sitting with a straight back, neck hyperextended torticollis to the left side.
- conjugated upward deviation of bilateral eyes.
- tongue protrusion and jaw spasm.
- talk in short phrases.
- Gait was normal.
- peripheral neurological examination unremarkable.

Further history, prochlorperazine maleate was taken for the past three days for upper respiratory tract infection.

Diagnosis made prochlorperazine maleate induced acute dystonic reaction.

- drug was discontinued
- treated with syrup diphenhydramine.
- symptoms recurred after ten minutes.
- given intravenous diazepam and the symptoms completely resolved.
- admitted for close observation and further investigation.



Acute dystonic reactions include:

- contractions of the muscles particularly in the facial, trapezius, dorsal levator scapulae and rhomboid muscle,
- opisthotonos,
- torticollis,
- dysarthria,
- oculogyric crisis, and tortipelvic crisis.

- A prompt and near complete resolution of symptoms was achieved with diphenhydramine, although full resolution required addition of benzodiazepines soon after.
- The patient had relapse of symptoms after first dose of diphenhydramine, this suggested more than one dose of anticholinergic agent maybe needed for complete resolution of acute dystonic reaction.

- Differential diagnosis; side effect of medication, patient with postencephalitic parkinsonism and brainstem encephalitis.
- The diagnosis of acute dystonic reaction is always a challenge for physicians in emergency department as the symptoms can be confused with epilepsy, encephalitis, paroxysmal tonic upward gaze and eye movement tics.

DISCUSSION

- Pharmacologic treatment with anticholinergic agent or benzodiazepines is the recommended treatment
- In this case, anticholinergic agent i.e diphenhydramine was used in view of safety and efficacy of others anticholinergic agent such as procyclidine have not been established in pediatric group.

- Period of reaction from days to months after administration of the causative drug.
- Therefore, careful and detailed drug history are crucial to establish the diagnosis and subsequently avoiding the trouble of going through detailed and exhaustive neurological examination and investigations.

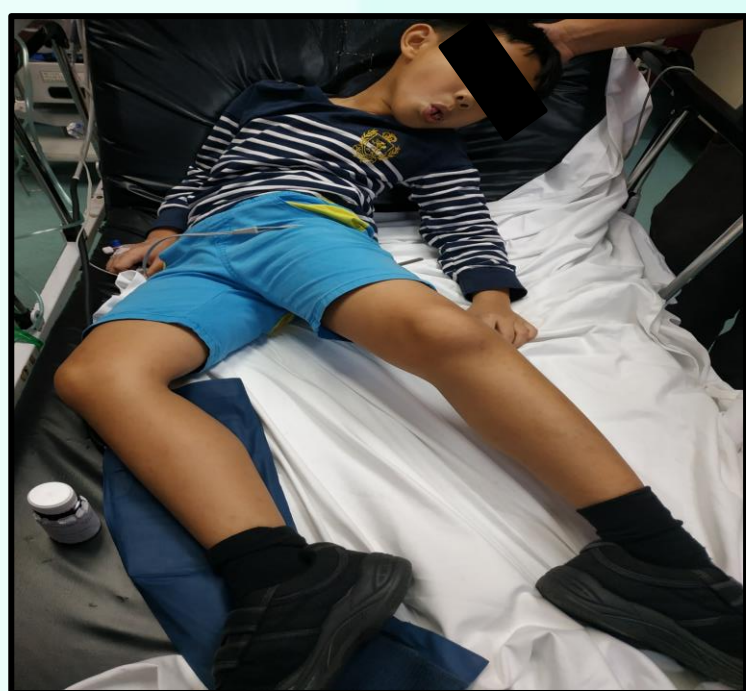


Figure 1: Note the prominent torticollis and tongue protrusion.

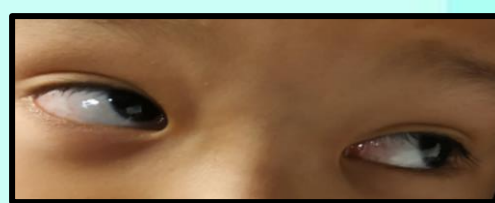


Figure 2: oculogyric of bilateral eyes



Figure 3: resolved symptom post-syrup diphenhydramine.

CONCLUSION

Early intervention is crucial in managing acute dystonic reaction to prevent life threatening condition such as laryngeal spasm. Careful monitoring of the patient is warranted since there is risk of relapse of symptoms after treatment was administered.

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