Images in...

Opsoclonus and lingual myoclonus due to organophosphate poisoning: images in clinical medicine

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DESCRIPTION

A 12-year-old girl was referred to the emergency services with a history of consumption of pesticide chlorpyrifos (chlorpyrifos (0,0 diethyl l0 (3,5, trichloro-2-pyridyl) phosphorothioate)), an organophosphorus compound, followed by multiple episodes of vomiting. On examination, she was conscious. Her pulse rate was 100/min, blood pressure 120/80 mm Hg, temperature 37°C, and respiratory rate 22/min, regular. Her pupils were of normal size and light reflex bilaterally. On the second day, she became drowsy, tachypnoeic and had hypersalivation. Her eye movement was abnormal but pupillary reaction was normal. On the third day, her neurological examination revealed bilateral complete ptosis and continuous, rapid, involuntary, multivectorial (horizontal and vertical), random, chaotic saccades in all directions, conjugate fast eye movements without intersaccadic intervals consistent with opsoclonus (Video 1). The pupils were bilaterally constricted with sluggish light reflex. There were repetitive, rhythmic jerks of the tongue, suggestive of lingualmyoclonus (Video 2). There was poor neck holding, areflexia and absence of gag reflex. Plantar response was absent bilaterally. The patient underwent endotracheal intubation for airway protection as she developed respiratory arrest. Pseudocholinesterase was 1500 U/l (Ref: 4650–10 440 U/l). She was diagnosed to have opsoclonus, lingualmyoclonus due to organophosphorus poisoning (Intermediate Syndrome). She recovered with atropine, oximes and antibiotics. After 4 days on ventilator she was weaned off. Review at 3rd and 6th month was normal and she is currently under psychiatric follow-up.

Learning points

▸ Eye movement disorders are one of the more common manifestations of organo-phosphate intoxication, and opsoclonus should now be included among these.1 The combination of opsoclonus, lingualmyoclonus due to Intermediate Syndrome is uncommon.
▸ Opsoclonus is seen primarily in association with neuroblastomas, autoimmune processes or after viral encephalitis and paraneoplastic syndromes, and has also been described after ingestion of organophosphates, lithium, cetirizine, amitriptyline or diphenhydramine.2

Competing interests None.
Patient consent Obtained.

REFERENCES
