



A RARE PRESENTATION OF OP POISONING WITH INTERMEDIATE SYNDROME AS TRANSIENT OPHTHALMOPLÉGIA

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KEYWORDS :

INTRODUCTION

The intermediate syndrome (IMS) following organophosphorus (OP) insecticide poisoning was first described in the mid-1980s. It usually becomes established 2-4 days after exposure when the symptoms and signs of the acute cholinergic syndrome are no longer obvious features often include weakness of respiratory muscles, muscles innervated by some cranial nerves etc.,. It is now emerging that the degree and extent of muscle weakness may vary following the onset of the IMS

CASE REPORT

A 46-year-old male brought to casualty with ingestion of chlorpyrifos compound, later atropinisation was done and maintenance dose was kept, along with oximes. On examination pupils were dilated, pulse rate 126/min, with dryness of mouth, on auscultation lungs were clear. On day 3, patient started complaining of doubling of vision on attempted left gaze. The patient had no history of weakness of the limbs, no difficulty in breathing, no altered sensorium, seizures. On examination higher mental functions, muscle tone, reflexes were normal. On eye examination right medial rectus palsy was observed, with no nystagmus, remaining cranial nerves examination was normal. Complete hemogram, serum electrolytes RFT, LFT were also normal, his serum cholinesterase level was 868 U/L, his serum CPK levels were 566 U/L. On day 6 patient had no complaint of doubling of vision, with eye examination was normal



Fig: Ophthalmoplegia

DISCUSSION

Intermediate Syndrome occurs between the initial acute Cholinergic manifestations and the late Organophosphate Induced Delayed central Nervous system symptoms. The basis for Intermediate Syndrome is that nicotinic transmission requires inhibition of at least 80% of the synaptic AChE unlike the muscarinic synapses and nerve endings where AChE can be easily inhibited, it occurs only in moderate to severe poisoning. The end result is hyperstimulation of the Neuromuscular Junction by excessive Acetylcholine, initially resulting in fasciculation, which later is followed by Neuromuscular Paralysis, the effect of intermediate syndrome may last for 2-18 days. The external ocular muscles have the highest concentration of AChE in the body. The high operating frequency of the external ocular muscle motor units is considered to render these motor units vulnerable to fatigue than extremity muscles elevation of serum CPK in OP poisoning may be due to myonecrosis caused by persistent depolarization at the neuromuscular junction and oxidative cellular damage to muscle membrane, used as a biomarker, as its elevation are prone for IMS from studies. In literature one case has been reported similarly from TN Medical College, Mumbai, few cases have been reported from Srilanka.

CONCLUSION

OP poisoning with IMS as ophthalmoplegia is a rare presentation, Management of intermediate syndrome is by early detection and supportive care, Controlled randomised clinical studies are been done to evaluate the efficacy of oximes in combating the IMS

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