

≈ ORAL PRESENTATIONS ≈

OP 008

Myocardial Infarction in Organophosphorus Poisoning**Shankar M Bakkannavar**, Vinod C Nayak, Predeep Kumar G*Department of Forensic Medicine and Toxicology, Kasturba Medical College, Manipal University, Manipal, India***Abstract**

Self-poisoning with Organophosphorous (OP) pesticides is a major problem across the Asia Pacific region. They are the leading cause of suicidal deaths in southern peninsular India as they are easily available, lack of stringent regulations of the sale & use of these compounds and illiteracy among the people. Death due to complications arising from Organophosphorous toxicity is a well-known entity which may be due to the combined effects of muscarinic actions, nicotinic actions or the effects on the central nervous system. Myocardial infarction, a rare complication arising due to Organophosphorous toxicity is to be considered as a cause of death. The paradoxical vasoconstriction following Organophosphorous compound ingestion in atherosclerotic coronary vessels plays an important role in the pathogenesis of myocardial infarction in these cases. The pathophysiology of Myocardial Infarction due to Organophosphorous poisoning has been outlined in earlier researches. Awareness of cardiac complication, proper monitoring and treatment could prevent unexpected death of victims of Organophosphorous poisoning.

Objective: To look for the possible correlation between the Organophosphorous compound poisoning and cardiac pathology

Methods: Retrospective research in which hospital records of patients admitted with history of organophosphorus poison were analysed.

Results: Out of 193 cases studied, 165 cases were confirmed case of OP poisoning by Acetyl Cholinesterase levels and cardiac involvement was confirmed in 38 cases by raise in the levels of cardiac enzymes (CKMB). Males were affected more when compared to females in all the age groups. More no. Of fatal cases were recorded in the 3rd and 5th decades of life. More no. Of CKMB confirmed cases were in the 2nd to 4th decades of life.

Conclusions: Myocardial Infarction is to be considered as a complication of Organophosphorus poisoning. As ours is a retrospective study, more and more prospective

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studies in this field are necessary to look for more relevant cardiac findings and complications associated with the Organophosphorus poisoning.
