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Poster Presentation

Occupational Toxins and Neuroinflammation

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Abstract

There were many occupational toxins for central nervous system and peripheral nervous system such as toxic and heavy metals. The aim of this study was introduction of occupational toxins with neurological effects and inflammatory effects specially. It is a review article. Researcher found the important data about the occupational toxins for nervous systems. Author searched in related journals, websites and texts about the subjects. There were many occupational toxins in metals and metalloid for example; lead, mercury, manganese and arsenic, organic solvents for example; n-hexane, methyl n-butyl ketone, carbon disulfide and chlorinated hydrocarbons for example; carbon tetrachloride and trichloroethylene, pesticides for example; organophosphate, carbamate and organochloride compounds, gases for example; carbon monoxide. Some of them had inflammatory effects on nervous systems. The researches demonstrated the inflammatory effects of arsenic and mercury in the nervous systems. These were used in many industries and workplaces. Guillain–Barré syndrome was showed with these exposures. These had toxicity effects for many organ systems. Control of these hazards had importance. Ways of control were important such as substitution, engineering controls; ventilations, personal protective devices, for example; respirators and gloves. Occupational examinations were done and could be useful for prevention from their effects. These were done in preplacement, periodic, fitness for work, return to work and special examinations in the workplaces. In exposure to neurotoxins, these examinations were focused on central and peripheral nervous system. There were many occupational toxins for central and peripheral nervous systems but some of them had inflammatory effects on these systems. Prevention and protection from these are important. Occupational health teams had an important role in this situation.

Keywords: Occupational, Toxins, Neuroinflammation, Exposures

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