A review of mercury pathological effects on organs specific of fishes

ABSTRACT

Rapid development has been associated with mercury pollution in the aquatic environment, leading to mercury toxicity in fish and other aquatic organisms. Histopathological abnormalities such as hyperplasia, inflammation, and necrosis have been observed in various fish tissues as a result of mercury contamination based on organic mercury (methylmercury) and inorganic mercury (mercuric chloride) exposure via dietary or water exposure, respectively, with different duration doses of mercury. Knowing that tissue changes occurred at an important part of each organ that played various critical roles in the normal physiological actions of fish, it is critical to understand how fish respond to mercury contamination and how this heavy metal element affects their general well-being. This review paper focuses on major tissue histopathology changes in response to mercury toxicity and their potential use as a mercury contamination indicator in fish.