Nitrous Oxide and Neuroinflammation

Seyyedeh Negar Assadi*

Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

Published: 17 April, 2018

Abstract

Nitrous oxide was an anaesthetic gas that was used for many years. There were many anaesthetic drugs in operations with many side effects. Nitrous oxide had some side effects too. But it was a safe gas in many times. In hospital personnel who worked in operating rooms exposure to this gas was important. The objective of this study was the introduction of nitrous oxide and neurologic side effects. In the review paper in texts, magazines and guidelines the result was found. The researcher tried to finding new and applicable results for prevention of effects on operating room personnel. The nitrous oxide had neuroinflammation effects and could be caused demyelination of nerves and myeloneuropathy. It had symptoms similar to Vit B12 deficiency. Operating room personnel must be protected from exposure to nitrous oxide with proper ventilation such as scavenging systems in the rooms. The mask of the patient must had not leak. Correct respirator must be recommended for these personnel with specific media cartridge for this gas. Control of nitrous oxide and Vit B12 in the blood was recommended too.

Keywords: Nitrous Oxide, Neuroinflammation, Exposure

*Corresponding Author: Seyyedeh Negar Assadi

E-mail: assadin@mums.ac.ir