

Complications of Carbon Monoxide Poisoning

ESSAY

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Summary

Carbon monoxide is the most common and serious by-product of combustion and responsible for smoke-related morbidity and mortality.

As it is colorless, odorless, tasteless and non-irritating gas, the exposed person is usually unaware of its effect until serious disorders occur.

It has the toxic effects of tissue hypoxia and produces various systemic and neurological complications.

The main clinical magnifications of acute CO poisoning consist of symptoms caused by alterations of the cardiovascular system such as initial tachycardia and hypertension, and CNS symptoms such as headache, dizziness, paresis, convulsions and unconsciousness.

Carbon monoxide poisoning also produces myocardial ischemia, atrial fibrillation, pneumonia, pulmonary edema, erythrocytosis, leucocytosis, hyperglycemia, muscle necrosis, acute renal failure, skin lesions and changes in perception of the visual and auditory systems.

Of considerable clinical interest, severe neurological manifestations may occur days or weeks after acute CO poisoning. Delayed sequelae of CO poisoning are not rare, usually occur in middle or older, and are clinically characterized by symptom triad of mental deterioration, urinary incontinence and gait disturbance.

Occasionally, movement disorders, particularly Parkinsonism, are observed. In addition, peripheral neuropathy following CO poisoning usually occurs in young adults.

Controversy is present as regard hyperbaric oxygen as the main standard treatment of CO poisoning thus prevention remains a vital public health issue, requiring public education on the safe operation of appliances, heaters, fireplaces, and internal-combustion engines