



Nitrous Oxide Associated Neuropathy



Recreational Nitrous Oxide abuse can lead to demyelination and subacute combined degeneration of the spinal cord

- Recent increase in use of NO (Balloons, Whippets, Hippie Crack)
- Consider in cases of **vague neurological symptoms**, especially in young patients (i.e. 'legs feeling funny', clumsiness)
- Ask specifically about use of NO canisters when taking history
- Signs are often subtle - **depressed reflexes**, subjectively **decreased sensation, loss of proprioception, unsteady gait** - but can progress to permanent myelopathy [1]
- Recognition is essential for early diagnosis - proceed to MRI / B12 (although levels may be normal) / Methylmalonic acid levels
- Early **treatment with parental B12** and physiotherapy improves prognosis / prevention of permanent damage [2] [3]

[1] Thompson AG, Leite MI, Lunn MP et al. Practical Neurology 2015;15:207-209

[2] Al-Sadawi et al, American Journal of Medical Case Reports, 2018; 6(12): 237-240

[3] Alt RS, Morrissey RP, Gang MA, Hoffman RS, Schaumburg HH, Journal of Emergency Medicine 2011; 41: 378-80

For Safety Alerts and RCEM issued Safety Flashes see:

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