

A FATAL OUTCOME AFTER INTRATHECAL APPLICATION OF METHYLENE BLUE
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Objective: Methylene blue is used as an antidote in the treatment of poisonings with methaemoglobinemia-inducing substances. It should be administered only intravenously. In the previous century, however, it was used also as diagnostic tool to detect spinal dura fistulae or defects. despite neurotoxic effects with severe sequelae (meningeal irritation, paraplegia, radiculopathy, encephalopathy) (1, 2). We report an intrathecal methylene blue injection from last year. **Case report:** A sixty-year-old woman was operated on for a severe stenosis of the spinal canal in a small hospital in December 2007. A surgical revision of stenosed segments was necessary eight weeks later, and again after a further two weeks. At that time methylene blue was injected intrathecally to explore a spinal dura defect. The patient developed paraplegia, progressing to tetraplegia a few hours after the injection. She had to be intubated because of respiratory failure and was transferred for further treatment to a department of neurosurgery. Investigation by nuclear magnetic resonance (NMR) showed an extended intramedullary signal enhancement in the whole spinal cord up to the medulla oblongata. This myelopathy was considered as toxic-induced aseptic myelitis after intrathecal methylene blue administration. The patient was given highdose methylprednisolone and finally the lumbar liquor was drained. The liquor was blue-coloured and its protein concentration was massively elevated. In due course, all brainstem reflexes were absent and the patient died six days later. **Conclusion:** The presented case impressively demonstrates the neurotoxic effects of methylene blue after intrathecal administration. No specific treatment or antidote is available to reverse this professional error. Therefore, it is strictly contraindicated to use methylene blue intrathecally. **References:** 1. Evans JP, Keegan HR. Danger in the use of intrathecal methylene blue. JAMA 1960; 174: 856-9. 2. Schultz P, Schwarz GA. Radiculomyelopathy following intrathecal instillation of methylene blue. A hazard reaffirmed. Arch Neurol. 1970; 22: 240-4.