

## What kind of anaesthesia is safe in MS patient?

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MS occurs in genetically susceptible individuals by activated autoreactive T cells and cytokines, disrupting the blood-brain barrier. The inflammatory process produces demyelination and glial scarring in scattered areas of brain and spinal cord that leads to conduction blockade along the neural pathways wherein Na<sup>+</sup> channels are affected by endogenous oligopeptides resembling blockade by local anaesthetics .

Literature regarding anaesthetic management contains use of general anaesthesia , spinal and epidural techniques. General anaesthesia and epidural with low concentrations of local anaesthesia are considered safe.

Spinal anaesthesia has been implicated in postoperative exacerbation, so also epidurals with higher concentrations and longer duration.

The demyelinated neurons appear susceptible to the neurotoxicity of local anaesthesia and aggravate the conduction blockade. Intravenous local anesthetic may unmask silent demyelination and aggravates negative symptoms of MS by increasing the conduction blockade. Intrathecal local anesthetic for spinal anesthesia was reported to unmask silent demyelination.

General anesthesia has less risk of complications than regional methods in MS patients.

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