

Introduction

Multiple Sclerosis (MS) is a chronic autoimmune disorder that affects the central nervous system. It is characterized by demyelination, and inflammation of nerve fibers.¹ The disease affects approximately 2.8 million people worldwide and females have a 2:1 incidence of disease compared to males.¹ Studies have shown that pregnancy does not negatively impact the progression of disability in individuals with MS and obstetric and fetal outcomes are comparable to those in the general population.² Still, the use of obstetrical analgesia is a topic of debate due to concerns about the potential neurotoxicity of local anesthetics on demyelinated fibers and their potential relationship to subsequent relapses in individuals with MS.

Case Report

A 34-year-old G6P0 with MS on Ocrelizumab presented at our Institution for a scheduled cesarean delivery. During pregnancy, Ocrelizumab was held. After a detailed history and physical exam, no neurologic symptoms nor respiratory dysfunction were appreciated. As there is always a possibility of disease exacerbation, high-dose steroids were available in the operating room. The patient received a combined spinal epidural with 0.75% intrathecal bupivacaine. Delivery was uncomplicated and the baby showed appropriate APGAR scores. Her epidural was removed, and her postoperative course was uneventful.

Conclusion Continued

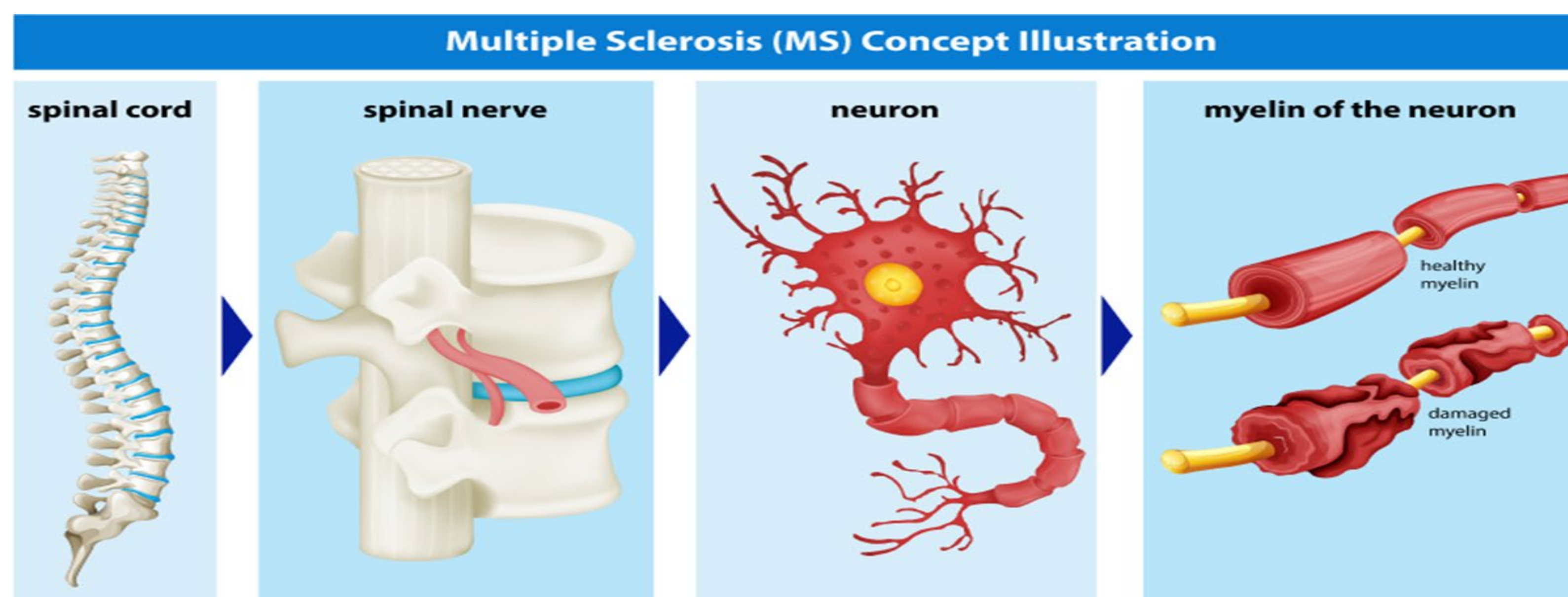
High dose steroid therapy can effectively treat any severe exacerbation of MS. In the event of general anesthesia, succinylcholine must be avoided as it can lead to hyperkalemia and subsequent cardiac arrest. Pregnant patients undergoing cesarean delivery often undergo neuraxial analgesia. There were initial concerns that the neurotoxicity of local anesthetics could increase the risk of relapse or precipitate exacerbations.⁴ Although multiple studies have shown some patients with worsening MS after neuraxial analgesia, none show a clear causal relationship between the two events.⁴ Therefore, a combined spinal-epidural anesthesia technique with amide-type local anesthetic agents is an effective and safe option for cesarean delivery in patients with multiple sclerosis.

Conclusion

It has been shown that patients with MS can safely become pregnant and remain well throughout pregnancy.² Hyperthermia, physical and emotional stress can lead to an exacerbation of the disease.³ The relapse can be mild or severe with the presentation of optic neuritis.³

References

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<https://www.steadyhealth.com/articles/diagnosing-multiple-sclerosis-with-spinal-tap-cerebrospinal-fluid>