

Anesthetic management of an obstetric patient with Behçet disease Complicated by Transverse myelitis



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Introduction

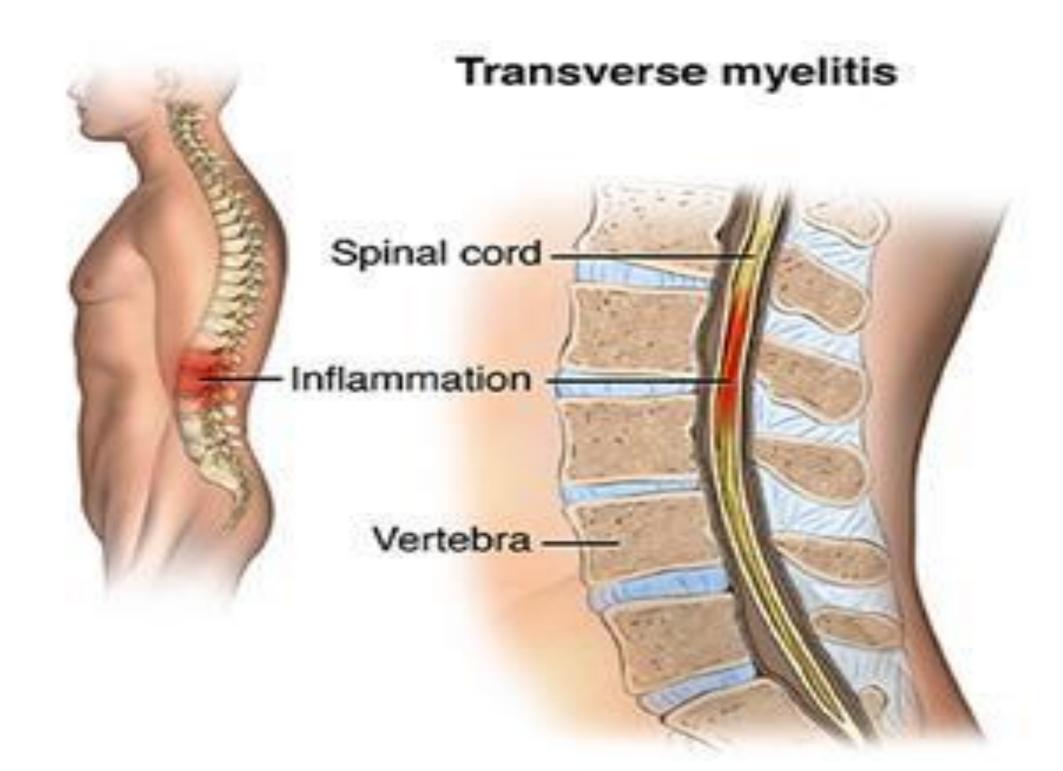
Transverse myelitis (TM) is an acute, inflammatory attack of the spinal cord that typically presents with symptoms developing over hours to days and worsening throughout a time period that can last up to several weeks of life implications. Its annual incidence does not exceed 1-8 cases per million. It can also be a manifestation of neuro-Behçet's disease (BD). Neuro-Behcet's disease (NBD) is another rare neurological disorder affecting patients with BD. For those two diseases to be present in the same patient sets a unique case to manage. Each of these rare conditions can impact the provision of medical care across different clinical settings. The aim of this case report is to discuss anesthesia management in such patients, particularly during C-section.

Case presentation

A 37-year-old female, Gravida 5 para 3 plus 1, known case newly diagnosed Behçet disease showing elevated B51 marker and features of painful genital ulcers, associated with recurrent transvers myelitis affecting T3 to T7 levels, autoimmune thyroiditis with a normal thyroid function hypercholesterolemia, known osteoporosis on vitamin D supplements, and a known smoker with mild bronchial asthma.

Imaging studies were conducted, magnetic resonance imaging (MRI) was done, which revealed a new finding, further enhancement segments from T3-T7. Soon afterwards, patient was complaining of recurrent stabbing pain in the back after that, she started to have worsening right lower limb weakness, which began to interfere with her daily activities as she became wheelchair bound. As well as stabbing pain running down her chest, on the course of her nerve injury. No numbness or orthostatic hypotension present.

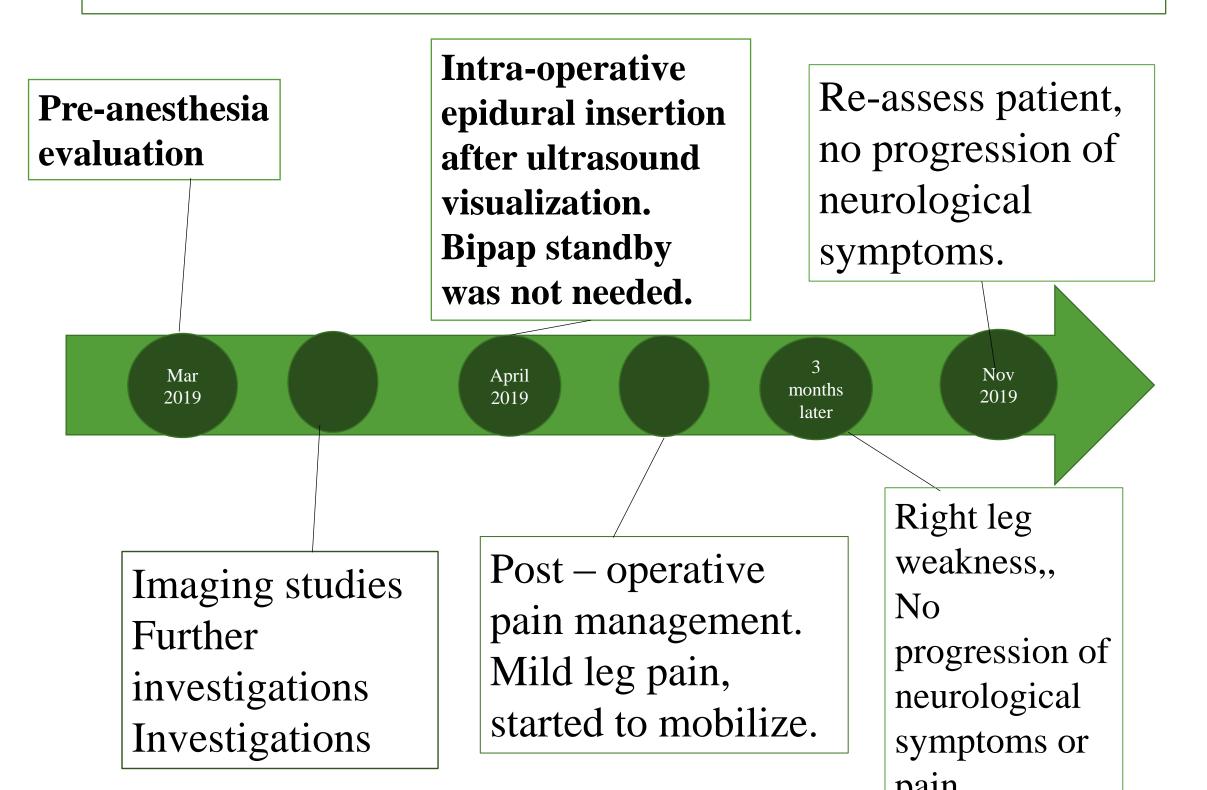
During examination, motor nerve examination revealed normal tone with full power in all extremities except her right hip flexor 2/5 and right knee flexor 2/5, Right knee extension 4/5. Her sensory and cerebellar examination were intact.



Hospital course

Patient had undergone neuroaxial epidural anesthesia with fentanyl 100 mcg with 3 mg morphine, 11 mL of lidocaine 2% and 4 mls Bupivacaine 0.5%. the block was done successfully, with this patients current MRI finding of T3-T7 and epidural block up to T4, assisted Bipap was set as standby for any accessory muscle weakness during OR. Followed with multimodal analgesia, and physical therapy to be Reassessed. after 3 visits spanning the course of 6 months.

Patient received pain medication as needed and was mobilizing after her twin delivery, she was followed up with physical therapy, patient is doing well no further neurological complaints post-op.



Discussion

Neuro-Behcet's disease (NBD) is one of the most serious complications in patients with Behcet's disease (BD).women with TM face increased risks of preterm delivery due to the presence of spinal cord lesions, which compromise their ability to perceive labor.

Patients with BD or TM who require surgery may face complications due to anesthesia. Questions remain as to the most optimal management of anesthesia in pregnant women with a chronic or acute TM (BD).

Plan for our patient was a neuroaxial block. Autonomic disturbances such as hypertension and arrhythmia are possible complications. We suggested epidural approach would be less risky and the patient elected it. The inflammatory nature of TM and BD may lead to difficulty with intubation and ventilation, due to ulceration of the oropharyngeal space in many patients. Intubation is itself a risk factor for ulceration in patients with BD. These neurological and dermatologic issues present a challenge in anesthesia.

Conclusions

Anesthesia approaches in pregnant women with TM, BD, or NBD will always be unique. Multidisciplinary involvement can facilitate safe administration of anesthesia in these patients. Our patient did not suffer any progression of neurological symptoms after neuroaxial block received. The development of standardized recommendations and protocols could greatly improve the quality and outcomes of anesthesia in patients with TM, BD, or NBD. Using epidural approach in these patients was successful. Epidural blocks might be preformed safely.

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