OLGU SUNUMU / CASE REPORT

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Behçet Hastalığı ve Multipl Sklerozun Birlikte Bulunduğu Hastalarda Anestezinin Zorlukları; Bir Olgu Sunumu

Challenges of Anesthesia in Coexisting Behçet's Disease and Multiple Sclerosis: A Case Report

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ÖZ

Bu olgu sunumunda Behçet Hastalığı ve Multipl Skleroz (MS) tanısıyla eş zamanlı tanı konulan bir hastanın anestezi yönetimini paylaştık. 60 yaşında kadın hastaya stabilizasyon amacıyla lomber omurga ameliyatı uygulandı. Hastanın geçirmiş olduğu serebrovasküler olay, Behçet hastalığına bağlı mukozal ülser ve MS'e bağlı nöroinflamasyon öyküsü bu vakayı zorlaştırdı ve özel ilgi gerektirdi. Bu nedenle vakanın anestezistler açısından ilginç olduğunu düşündük. İnflamasyonu en aza indirmek ve cerrahi stres yanıtını düzenlemek için hasta steroid tedavisi şemsiyesi altında opere edildi ve mukoz membranlara basıyı azaltmak adına daha küçük çaplı endotrakeal tüpün seçimine özen gösterildi. Nöroinflamasyondan kaçınmak amacıyla genel anestezi tercih edilerek literatürdeki benzer veya farklı vakalardaki yaklaşımlar tartışıldı. Hastada perioperatif komplikasyon yaşanmadı ve operasyon süresi sonunda şifa ile taburcu edildi.

Anahtar Kelimeler: behçet hastalığı, multipl skleroz, anestezi, havayolu yönetimi

ABSTRACT

In this case report, we shared the anesthesia management of a patient concurrently diagnosed with Behçet's Disease and Multiple Sclerosis (MS). A 60-year-old female patient underwent lumbar spine surgery for stabilization. The patient's history of cerebrovascular events, mucosal ulcers due to Behçet's disease, and neuroinflammation due to MS made this case difficult and required special attention. Accordingly, we thought that the case was interesting for anesthesiologists. She was operated under the umbrella of steroid therapy to minimize inflammation and regulate the surgical stress response. Care was taken to choose a smaller endotracheal tube in order to reduce the pressure on the mucous membranes. The preference for general anesthesia was aimed at avoiding neuroinflammation, and approaches in similar or different cases from the literature were discussed. The patient did not experience perioperative complications and was discharged in good health at the end of the operation period.

Keywords: behçet's disease, multiple sclerosis, anesthesia, airway management

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INTRODUCTION

Behçet's Disease, described by Hulusi Behçet in 1937, is a chronic inflammatory and multisystemic disorder with an unknown etiology. Although Behçet's Disease primarily manifests with three main symptoms (recurrent oral aphthae, painful genital ulcers, and uveitis) it can also affect various systems, leading to skin lesions, vasculitis, gastrointestinal involvement, and neurological symptoms. Consequently, the disease is considered to have a multifactorial etiology involving age, gender, infections, genetic, and immunological factors (1).

Genetic transmission of Behçet's Disease is well-documented, with a strong association with HLA-B51 positivity. HLA-B51 is particularly prevalent among patients with posterior uveitis or neurological involvement, suggesting that HLA-B51 positivity may influence disease severity. Due to overlapping symptoms, Behçet's Disease can be mistaken for Multiple Sclerosis (MS), making differential diagnosis crucial (2). The diagnosis of Behçet's Disease requires the presence of recurrent oral aphthous ulcers along with at least two of the following major criteria: genital ulcers, skin lesions, eye inflammation, and a positive pathergy test (2).

Differentiating between MS and Behçet's Disease involves MRI imaging and cerebrospinal fluid (CSF) analysis. MS, like Behçet's Disease, is an autoimmune demyelinating disorder that typically affects the central nervous system in young adults. MS diagnosis relies on the identification of demyelinating plaques on MRI and the presence of oligoclonal bands in the CSF, although negative results do not entirely rule out MS (3).

This article presents a rare case of a patient with concurrent MS and Behçet's Disease. This case report highlights the unique challenges and considerations in managing anesthesia for our patient. The coexistence of these two conditions presents a complex clinical scenario due to the combined impact of vascular inflammation and neurological impairment. Proper perioperative management is crucial to prevent complications such as thrombus formation, mucosal damage, and exacerbation of MS symptoms. This case underscores the importance of a multidisciplinary approach and tailored anesthetic strategies to ensure optimal patient outcomes. We believe that understanding the perioperative risks, anesthesia management, and postoperative care for patients with such multisystemic involvement will be valuable for anesthesiologists and surgeons.

CASE REPORT

A 60-year-old female patient with a known history of hypertension, Behçet's Disease, Multiple Sclerosis (MS), and previous cerebrovascular evet (CVE) was scheduled for lumbar stabilization surgery by the neurosurgery team. As part of the preoperative preparations, consultations with rheumatology and neurology were conducted, evaluating the patient's uveitis and mucocutaneous involvement. The surgery was planned under general anesthesia with steroid therapy. The patient was scheduled for surgery during a period without recurrent oral aphthae.

In the preoperative area, the patient's temperature was measured and warmed appropriately. Following premedication, she was transferred to the operating room. Routine anesthesia monitoring, including non-invasive blood pressure, pulse oximetry, and electrocardiography, was implemented.

General anesthesia induction was then performed. Due to the characteristic brainstem involvement and neuroinflammation seen in Behçet's Disease and MS, general anesthesia was preferred over regional anesthesia.

Anesthesia induction was achieved with a combination of propofol, fentanyl, and rocuronium, while maintenance was managed with total intravenous anesthesia (TIVA) using propofol and remifentanil. The depth of anesthesia was adjusted using bispectral index monitoring. The patient received 20 mg of methylprednisolone. The smallest suitable endotracheal tube was selected for intubation. While ultrasound could have been beneficial to minimize mucosal pressure related to prone positioning and large tube diameters, it was not used in this case. Adequate peripheral venous access was established with a 22-gauge catheter in the left brachial vein and an 18-gauge catheter in the left hand. Additionally, arterial cannulation was performed in the right radial artery.

The patient was then turned to the prone position, ensuring pressure points were protected, and the surgery commenced. The lumbar stabilization procedure involved three levels and lasted approximately two hours. No perioperative complications were observed.

The total blood loss was recorded at 600 ml, and no perioperative blood transfusions were administered. At the end of the operation, the patient was extubated in the operating room and transferred to the recovery room.

Postoperatively, there were no new aphthae, mucosal ulcers, or skin lesions. The patient's MS symptoms did not exacerbate in the early postoperative period. Following inpatient monitoring, the patient was discharged with appropriate recommendations.

DISCUSSION

Behçet's disease is a vasculitis with multisystem involvement. It has been reported that in some cases, it can be confused with multiple sclerosis (MS) or exhibit MS symptoms. In our current case report, we discussed the successful management of a patient with coexisting Behçet's disease and MS. This combination required special attention as it involved inflammation in the vascular system as well as damage and inflammation in the neurological system (2,3).

An important factor in the mortality and morbidity of Behçet's disease is the development of unexpected thromboses and aneurysms. Our patient had recently experienced a cerebrovascular thrombosis and was receiving anticoagulant therapy as a result. Prolonged discontinuation of anticoagulant therapy in the perioperative period increased the risk of thrombus formation. Adjusting the perioperative medications and managing the hospital stay to prevent thrombotic complications are critical considerations for these patients(4).

In patients with Behçet's disease, intravenous access, catheterizations, and regional anesthesia can increase skin and mucosal lesions. If the patient has existing aphthae, these could also worsen. Airway management can become challenging in patients with severe oropharyngeal ulcers. There have been cases reported in the literature where severe oral ulcers caused difficulties with intubation(5). Therefore, it may be beneficial to schedule elective surgeries during periods when the patient's aphthae are absent or regressed.

Painful aphthae, along with postoperative pain, can lead to a negative experience and increased systemic response. Another unique aspect of our patient was the presence of MS. The adverse developments mentioned above could also exacerbate MS symptoms. During lumbar spinal surgery, turning patients to the prone position, using large tubes for the airways, or applying high cuff pressures can cause compression and circulation disorders in the mucosa. In our patient, we chose endotracheal tubes with smaller outer diameters and kept the cuff pressure as low as possible. We believe this precaution contributed to preventing an increase in the patient's oral aphthae in the postoperative period.

Although there are cases where regional anesthesia has been preferred in MS patients, needle punctures on the skin can trigger inflammation in Behçet's disease. The coexistence of these two diseases makes general anesthesia a better option. There are also cases in the literature demonstrating successful epidural anesthesia in patients with Behçet's disease(6,7).

Additionally, in complicated cases of Behçet's disease, the use of multiple drugs and immunosuppression are issues that need careful attention in terms of anesthesia. Patients are often operated on under the umbrella of steroids. Steroids and other medications should be managed carefully to regulate the systemic inflammatory response, reduce postoperative infections, and control blood sugar levels.

CONCLUSION

In conclusion, the anesthetic management of Behçet's disease should consider reducing mucosal damage, achieving successful airway management, preventing the triggering of systemic inflammation, avoiding regional anesthesia if possible, managing pain, and preventing thromboembolic complications.

Informed Consent: Consent has been obtained from all participants for the use of data

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