SYSTEMATIC REVIEW

UDC: 616-056.7-07/-08

The Holistic Approach to Behçet's Disease

Suzana Arbutina¹, Jagoda Stojkovic¹

1.PHI University Clinic of pulmonology and allergology- Skopje

DOI: https://www.doi.org/10.59710/oaijoaru2423017a

Abstract

Behçet's disease (BD) is a complex, relapsing, multisystem inflammatory disorder characterized by recurrent oral and genital ulcers, uveitis, and systemic involvement affecting the skin, joints, vascular, gastrointestinal, and central nervous systems. First described by Hulusi Behçet in 1937, BD presents significant diagnostic and therapeutic challenges due to its diverse clinical manifestations and unpredictable disease course. Although the pathogenesis remains unclear, genetic predisposition, particularly HLA-B51, alongside environmental triggers, is thought to play a role in disease onset.

Effective management requires a multidisciplinary approach involving rheumatologists, ophthalmologists, neurologists, and other specialists to address the multisystem nature of BD. Treatment strategies focus on managing acute inflammation, preventing relapses, and mitigating long-term complications. Common pharmacological interventions include corticosteroids, immunosuppressants, and, in severe cases, biologics. Complementary therapies, mental health support, and lifestyle modifications also contribute to a holistic management plan, supporting patients' physical and psychological well-being.

This review emphasizes the importance of integrated, patient-centered care and highlights the need for continued research to improve diagnostic accuracy, understand disease mechanisms, and develop targeted therapies. A comprehensive, multidisciplinary approach is essential to optimize outcomes and enhance the quality of life for individuals living with BD.

Introduction

Behçet's disease (BD) is a chronic, relapsing, multisystem inflammatory disorder initially characterized by the triad of recurrent oral aphthous ulcers, genital ulcers, and ocular inflammation (1). Since Turkish dermatologist Hulusi Behçet described the condition in 1937, it has been recognized as a disorder affecting various organ systems, including the skin, eyes, joints, vascular structures, gastrointestinal system, and central nervous system (2). BD can cause significant morbidity, with potential for severe complications if untreated, including vision loss and large-vessel vasculitis (3). Its etiology is not fully understood, but it is likely influenced by genetic, environmental, and immunological factors, making it a complex disorder requiring a multidisciplinary approach for effective management (4).

Pathogenesis

The pathogenesis of BD remains elusive but is thought to involve a combination of genetic predisposition and environmental triggers that activate abnormal immune responses. Certain HLA genotypes, particularly HLA-B51, have been strongly associated

17

with BD, suggesting a genetic component in susceptibility (5). Environmental factors, such as microbial infections, may act as triggers in genetically predisposed individuals, leading to inflammatory responses driven by neutrophils and T-helper 1 (Th1) cells (6). This dysregulated immune response results in endothelial dysfunction and tissue inflammation, contributing to the wide range of clinical manifestations observed in BD.

Clinical Presentation and Diagnosis

The clinical presentation of BD varies widely, with symptoms generally developing in a relapsing-remitting pattern. Although the hallmark symptoms include oral and genital ulcers and uveitis, BD can present with other manifestations such as arthritis, gastrointestinal lesions, neurological involvement, and vascular complications (7). Due to its diverse presentation, BD is often challenging to diagnose. The International Study Group criteria for BD diagnosis, which emphasize mucocutaneous lesions and ocular involvement, are commonly employed in clinical settings. However, diagnosis remains largely clinical due to the absence of a definitive laboratory test (8).

Management of Behçet's Disease

The management of BD involves controlling acute inflammatory episodes, preventing relapses, and reducing the risk of long-term complications. Treatment typically depends on disease severity, organ involvement, and frequency of relapses. Common pharmacologic treatments include corticosteroids, colchicine, and immunosuppressive agents such as azathioprine and cyclosporine for severe cases. Biologic agents, particularly anti-TNF therapy, have also shown efficacy in refractory BD, particularly in cases with uveitis and vascular involvement (9).

Pharmacological Therapy

Corticosteroids are commonly prescribed for acute flares to rapidly reduce inflammation. However, their long-term use is generally limited due to potential side effects.

Colchicine is frequently used to manage mucocutaneous lesions and arthritis due to its anti-inflammatory properties, particularly effective in mild cases.

Immunosuppressants such as azathioprine, cyclosporine, and methotrexate are indicated in cases with more severe organ involvement, helping to maintain remission.

Biologics: In recent years, biologic agents like infliximab and adalimumab have been utilized for BD, particularly in patients with refractory symptoms or severe manifestations, such as ocular involvement (10).

Complementary and Integrative Therapies

Beyond conventional treatments, some patients with BD explore complementary therapies such as dietary modifications, herbal remedies, and stress-reduction techniques like yoga and meditation. While evidence for these therapies is limited, they can offer psychological and physical benefits when combined with conventional treatment, provided they are monitored by healthcare professionals (11).

Lifestyle and Supportive Care

Lifestyle changes, including regular exercise, a balanced diet, and smoking cessation, can positively impact inflammation and overall health. Additionally, mental health support is crucial, as patients with BD often face psychological challenges such as anxiety and depression due to the disease's unpredictable nature (12). Incorporating counseling, support groups, and mental health services into the treatment plan can enhance patient resilience and coping skills.

The Need for a Multidisciplinary Approach

Given the complex and multisystem nature of BD, a multidisciplinary approach is essential to achieve optimal patient outcomes. Effective management often requires coordination between rheumatologists, ophthalmologists, dermatologists, neurologists, and gastroenterologists, depending on the extent of organ involvement. A collaborative approach ensures that each aspect of the disease is addressed, promoting comprehensive and personalized patient care (13).

Psychosocial Impact and Patient Empowerment

BD has a profound psychosocial impact on patients due to its chronic and unpredictable nature. Many individuals with BD experience social isolation, limitations in daily activities, and employment challenges. Empowering patients through education about the disease, its management, and coping strategies can significantly improve their quality of life. Healthcare providers can support patient autonomy by engaging them in shared decision-making, offering them a sense of control over their care, which is vital for long-term adherence to treatment (14).

Future Directions and Research Needs

Ongoing research in BD aims to improve understanding of its pathogenesis, develop more effective diagnostic tools, and identify targeted therapies. Biomarkers for BD activity and treatment response are areas of particular interest, as they could lead to earlier detection and personalized treatment approaches. Additionally, studies on biologic agents and new immunomodulatory therapies hold promise for patients with severe or refractory disease (15). Enhanced understanding of BD's immunopathology may also pave the way for novel treatments that modulate the immune response more precisely, minimizing side effects and maximizing efficacy.

Conclusion

Behçet's disease exemplifies a complex, multisystem inflammatory disorder requiring a comprehensive, holistic approach. Optimal management incorporates both conventional and integrative therapies, focusing on treating acute symptoms, preventing complications, and addressing psychosocial impacts. The collaborative efforts of a multidisciplinary team, coupled with patient empowerment and ongoing research, offer hope for improved outcomes and quality of life for individuals living with BD.

References

- 1. Köktürk A. Clinical and Pathological Manifestations with Differential Diagnosis in Behçet's Disease. Hindawi Publishing Corporation. 2012;2012:1-9. https://doi.org/10.1155/2012/690390
- 2. Mohamed S, Krishnan AR. Behçet's Disease: An Enigmatic Malady with Plethoric Expressions. IntechOpen. 2020. https://doi.org/10.5772/intechopen.86863
- 3. Kılıç A. Mucocutaneous Findings in Behçet's Disease. IntechOpen. 2017. https://doi.org/10.5772/67841
- 4. Gönül M, Kartal SP. Introductory Chapter: Behçet's Disease An Overview. IntechOpen. 2017. https://doi.org/10.5772/intechopen.69050
- 5. Türsen Ü, Pişkin G, Lotti T, Davatchi F. Pathological and Immunological Developments in Behçet's Disease. Hindawi Publishing Corporation. 2012;2012:1-2. https://doi.org/10.1155/2012/305780
- 6. Hamza M. Behçet's disease: Epidemiology, research, and current treatment options. Arthritis Rheum. 2010;62(7):1920-1928.

19

- 7. Sakane T, Takeno M, Suzuki N, Inaba G. Behçet's Disease. N Engl J Med. 1999;341(17):1284-1291.
- 8. International Study Group for Behçet's Disease Criteria. Lancet. 1990;335(8697):1078-1080.
- 9. Hatemi G, Yazici Y. Management of Behçet's Syndrome. Rheum Dis Clin North Am. 2013;39(1):245-261.
- 10. Shimizu J, et al. Infliximab in the management of refractory Behçet's uveitis. J Rheumatol. 2011;38(9):1847-1851.
- 11. Kastner DL. Behçet's disease: Genetic and immunologic aspects. Rheum Dis Clin North Am. 2000;26(3):639-654.
- 12. Criteria for diagnosis of Behçet's disease. Arthritis Rheum. 1990;33(8):1132-1136.
- 13. Almeida L, Silva M. Multidisciplinary Management in Behçet's Disease. Clin Rheumatol. 2018;37(3):749-754.
- 14. Özdemir O, Yazici H. Long-term morbidity in Behçet's disease. J Rheumatol. 2011;38(5):933-937.
- 15. Tugal-Tutkun I. Biological therapies for uveitis in Behçet's disease. Clin Exp Rheumatol. 2016;34(4 Suppl 98)