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Epidemiology and Clinical Profile of Behcet's Disease in a Sub-Saharan Country: About Five Observations

Thierno Amadou Wann[1*], Mamadou Lamine Yaya Bah[1], Mamadou Saliou Baldé[2], Abdoul Karim Baldé[3], Toumin Camara[1], Ibrahima Kalil Shiaman Barro[1], Amadou Kaké[1], Djibril Sylla[1]

[1]Internal Medicine, Teaching Hospital of Conakry, Conakry, Guinea
[2]Nephrology-Hemodialysis Department, Teaching Hospital of Donka, Donka, Guinea
[3]Ophtalmology Department CADES/O, CHU de Conakry, Conakry, Guinea
Email: *thwann@yahoo.fr

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Abstract

Behçet's disease (BD) is a multi-systemic vasculitis characterized by a triad made up of oral aphthosis, genital aphthosis and uveitis which may or may not be associated with visceral involvement. Other times described in the ancient silk road, BD is increasingly found in countries south of the Sahara with the mixing of populations. Our objective was to describe the epidemiology and clinical characteristics of BD in an African country. **Methodology:** This was a five-year retrospective study in the internal medicine department of Donka National Hospital. We used international criteria finding BD. Urinary dipstick was use for finding kidney disease. **Result:** During the period, five cases of Behçet's disease were collected. The average age was 35 years old. The male sex was more represented with 3 out of 5 cases. The most common clinical manifestation was oral aphthosis in all patients (100%), followed by genital aphthosis in 4 cases (80%). The other clinical manifestations observed were uveitis in 3 cases (60%), joint manifestations such as arthralgia in 3 cases (60%) and neurological manifestations such as chronic headache in one case (20%). HLA-B51 was found in two cases. The pattergic test done in two patients came back positive (100%). The patients received colchicine and oral corticosteroid therapy. Two patients were lost to sight. We deplored a death probably in a neuro-Behçet table before the rebellious headaches. **Conclusion:** Behçet's disease is a multi-systemic vasculitis that must be evoked and managed quickly in a tropical environment, especially since the prognosis, vital and functional prognosis can be engaged.

Keywords

Profile, Epidemiological, Clinical, Behçet, Sub-Saharan

1. Introduction

Behçet's disease (BD) is a systemic vasculitis of unknown origin that progresses through relapses and remissions [1] [2]. Clinically, this multi systemic vasculitis is characterized first by mucocutaneous and joint manifestations, and secondarily by ocular, vascular, neurological and digestive damage [3], topicality by its clinical polymorphism, its lack of specificity and the diagnostic difficulties [3] [4]. The geographical distribution of MB patients is variable around the world and tends to be concentrated on the ancient "Silk Road" those in the Mediterranean, Turkey, Iran, China to Japan particularly [3] [5]. The prevalence is highest in Turkey, ranging from 80 to 370 cases per 100,000 in habitants [5]. In Africa, particularly south of the Sahara, this pathology is rarely described [3]. Thus its confirmation can lead to a diagnostic delay. The aim of our study was to analyze the epidemiological and clinical characteristic as well as the therapeutic methods in a tropical environment of five and to identify any particularities.

2. Methodology

This was a retrospective, mono centric study over a period of five years from January 2016 to December 2020 in the department of internal medicine of Donka National Hospital. It covered all the patients hospitalized during this period. The diagnosis was made according to the criteria of the international BD study group. All the patient included with recurrent oral and genital aphtosis associated with at least one disorder such as arthritis, deep vein thrombosis or central nervous system involvement and patients with oral aphthosis associated with skin disorder (necrotic pseudo folliculitis or cutaneous hyper sensitivity at the puncture site). The patients were retained after the exclusion of other pathologies accompanied by oral or oral aphtosis in the context of a differential diagnosis. We checked for other manifestations (kidney disease using a dipstick).

3. Result

During the study period, five cases of Behçet's disease were collected, a prevalence of one case per year. The average age at diagnosis was 35 years with extremes ranging from 16 to 52 years. The male sex was more represented with 3 cases out of 5, a sex ratio of 0.6. The mean time to diagnosis of the disease and the onset of the first manifestation was 4.6 years. The most common clinical manifestation was recurrent oral aphthosis (**Figure 1**) in all cases (100%), followed by genital aphthosis (**Figure 2**) in four cases (80%). The other clinical manifestations observed were uveitis in 3 cases (60%), joint manifestations such as arthralgia in 3 cases (60%) and neurological manifestations such as chronic

headache in one case (20%). Ocular involvement was inaugural in one case. HLA-B51 was done in three patients and came back present in two cases, 66.6%. A non-specific biological inflammatory syndrome was noted in three cases. The pattergic test done in two patients came back positive (100%). All patients received colchicine. This prescription was motivated by the mucocutaneous involvement. Three patients received oral corticosteroid therapy for ocular involvement. No patient received immunosuppressive therapy. The evolution was marked by the disappearance of the mucocutaneous manifestations in all cases after eight to twelve months of treatment. The uveitis was recurrent in one case. Two patients were lost to sight. We deplored a death probably in a neuro-Behçet table before the rebellious headaches (Table 1). During follow up, we have no finding kidney disease or cardiaque manifestation of BD.

Figure 1. Buccal aphtosis.

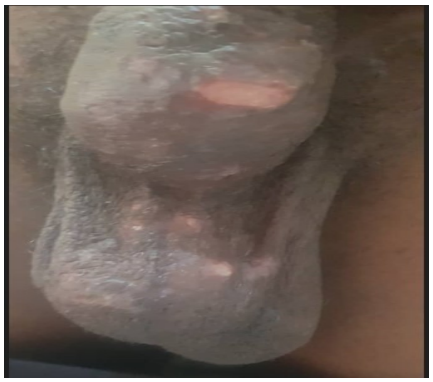

Figure 2. Genital aphtosis.

Table 1. Number of case by clinical manifestation.

Clinical manifestation	Number of case	Percentage (%)
Buccal aphtosis	5	100
Genital aphtosis	4	80
Uveitis	3	60
Pathergic Test positive	2	100
Joint manifestation	3	60
Neurological manifestation	1	20

4. Discussion

Behçet's disease was first described by a Turkish dermatologist named Hulusi Behçet in 1937 who reported the diagnostic triad consisting of recurrent mouth ulceration, genital ulceration and uveitis [6] [7]. The majority of our patients had this triad which made it possible to diagnose Behçet's disease without difficulty. This vasculitis tends to manifest during the third decade [1] [5] [6]. The average age of our patients was 35 years old; which corresponds to the literature. One patient was sixteen years old at diagnosis with symptoms that began a year earlier. Depending on the region, this disease affects men more in the countries of the Middle East and Japan [5] [8] [9] while in Turkey, it affects as many men as women [5]. Breakdown by sex in our series finds a male predominance with sex ratio of 0.6. This male predominance is found in other African series whether in the Maghreb or south of the Sahara [3] [10] [11] [12]. The clinical manifestations of BD are variable. In addition to mucocutaneous manifestations, general signs such as asthenia and fever are often encountered [3]. In our series, there was no objectified fever which can be explained by self-medication or excessive treatment for malaria in the face of any fever. BD is often associated with the presence of HLA-B51 in variable proportions depending on regions [3] [13]. This proportion remains much higher in the countries of the ancient silk road [3]. In our study population, three patients benefited from the search for this antigen as part of a research protocol and two patients expressed its presence. It should be noted that the presence of the HLA-B51 antigen can be found in the general population without BD and that all patients with BD do not necessarily have this antigen. To date, the management of MB remains empirical and depends on the different organs affected [3] [6]. This treatment typically uses Colchicine, corticosteroids and immunosuppressants. Early treatment can prevent relapses and complications [6] [14].

All of our patients received treatment combining colchicine and corticosteroid therapy as in most Africans eries [3] [10]. This choice is explained not only by the effectiveness of these treatments in cutaneous-articular forms and in the event of uveitis, but also by the availability of these treatments in tropical environments. In systemic forms or in severe uveitis not responding to conventional treatments with immunosuppressants, anti-TN alpha remain an effective option [6] [15]. This treatment remains not only long but above all expensive and not available in our regions. From an evolution point of view, the cutaneous-articular manifestations were able to improve with the classic treatment with colchicine/corticoid. We recorded two loss of follow-up, one death of the patient with chronic headaches taken into account by a neuro-Behçet. BD is associated with high morbidity and mortality, especially in the event of systemic involvement. This mortality remains higher in sub-Saharan countries compared to Maghreb or European countries [16].

5. Conclusion

Behçet's disease is a multi-systemic vasculitis whose diagnosis is essentially clin-

ical. Even if this diagnosis remains easy most of the time, its functional and vital prognosis can be engaged in the event of vascular, neurological and ocular damage. Our study shows that the epidemio-clinical aspect for a sub-Saharan country remains comparable to the data in the literature. With the mixing of populations, this disease is no longer the prerogative of the old Silk Road.

Conflicts of Interest

We declare that we have no conflict of interest in relation to this article.

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