

Case Report

A CASE REPORT ON BEHCET'S SYNDROME, A RARE MUCOCUTANEOUS DISEASE

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ABSTRACT

Aim: Behcet's syndrome is a chronic multisystem vasculitis of unknown origin with frequent manifestation of oral and genital ulcerations, ocular and skin lesions and other involvement of the central nervous system and the gastrointestinal tract. We present a case of Behcet syndrome presenting initially with isolated oral aphthous ulcers and the aim is to highlight the clinical features and its treatment.

Case Report: A 36 year old female with recurrent aphthous ulcers on the tongue for 2 days with a history of frequent recurrence. Patient responded initially to topical triamcinolone acetonide and low dose prednisolone. Two weeks later, there was a recurrence of oral aphthous with erosions on the oral mucosa with skin and genital lesions. A diagnosis of Erythema Multiforme major was made and patient placed on a higher dose steroid with resultant healing. There was another recurrence with lip crusting, sore throat, skin lesions, conjunctival inflammation and genitalia ulcerations. We then made a diagnosis of Behcet's syndrome. Patient was placed on Dapsone resulting in complete resolution of the lesions with no recurrence within and after three months of several recall visits.

Conclusion: A case of Behcet's syndrome that affected the oral mucosa initially and later, the conjunctiva, the skin, and the genitalia in a 36 year-old female. Health professionals should be aware of this rare condition.

Key words: aphthous ulcer, diagnosis, Behcet's syndrome, dapsone

INTRODUCTION

Behcet's disease or Behcet's syndrome also known as Silk Road disease is a rare systemic vasculitis disorder of unknown etiology characterized by recurrent acute inflammatory attacks.¹ It is a chronic, relapsing, multisystem inflammatory disorder.² It was named after Hulusi Behcet, a Turkish dermatologist who in 1937 presented

three cases of patients he followed for years with a triad of oral ulceration, genital lesions, and recurrent eye inflammation.^{3,4} Zeidan et al, 2016¹ referred to this manifestations as the triple-symptom complex. It can affect the skin, blood vessels, gastrointestinal tract, central nervous system, heart, and other organs, as well as causing aphthous ulcers, genital ulcers, and eye inflammation.⁵ Behçet's disease (BD) is also considered to represent an autoimmune reaction triggered by a yet to be identified infectious agent in a genetically predisposed person.⁶ Multiple criteria^{1,4} have been created as guides for diagnosis; however, given the wide spectrum of organ involvement, some cases remain undiagnosed. The diagnosis of Behcet's Disease

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may only be made over time as the clinical manifestations unfold sometimes separated by months and even years.³ Genetic studies have identified HLA-B51 to be the important genetic risk factor.⁷ There is a close correlation between the geographical distribution of HLA-B51 and its prevalence. In the aetiopathogenesis, there are indications of genetic susceptibility associated with environmental influence.⁸

Prevalence of BD worldwide ranges between 0.1/1000 and 1/10,000 with a significant presence in Asian countries 30°–40° north of the Equator from the Mediterranean to Japan.¹ Cases of BD seem to cluster along the ancient Silk Road, which extends from eastern Asia to the Mediterranean basin. The prevalence is 80 to 370 cases per 100,000 population in Turkey having the highest reported prevalence, 10/100,000 in Japan and 0.6/100,000 in Yorkshire.⁴ It remains rare in other countries such as the Americas including the Caribbean and African countries.^{2,3} Onset of Behcet's mostly peaks in the third decade.⁸ The male to female ratio is 7:1 in symptomatic forms, but women predominate over men in studies where less symptomatic forms are systematically looked for and included.^{4,9} Though oral aphthous ulcers are a frequent finding in patients with Behcet's, the diagnosis of this condition may be challenging when oral aphthous ulcers are the only persistent clinical manifestation at various times of presentation without the appearance or a history of the occurrence of the other component clinical features of this disease.

We present a case of Behcet's disease in a patient who presented to us initially with frequent recurrent isolated occurrence of oral aphthous ulcers only and to highlight the challenges associated with the diagnosis of Behcet's disease occurring initially as isolated recurrent aphthous ulcers and the importance of early diagnosis and treatment of the lesion.

CASE REPORT:

A case of a 36 year old married female fashion designer who first presented 2 years ago to the Dental clinic, Department of Dental and

Maxillofacial Surgery, Federal Medical Centre, Asaba, Delta State with a complaint of a one year history of frequent recurring oral ulcerations on the tongue and lips. The patient at this early stage of presentation was managed on account of recurrent aphthous ulcers. She was placed on topical steroid-triamcinolone acetonide 0.1% dental paste three times daily for 2 days, Tablet amoxicillin and clavulanic acid combination 625mg 12hourly for 5 days, metronidazole 400mg 8 hourly for 5 days and paracetamol 1000mg three times daily for 3 days. Following several a two week follow up visit, the ulcers healed. After one year, the patient again presented to the Dental clinic with recurrent aphthous ulcers on the tongue of 2 days duration and was referred to the clinical oral pathology and oral medicine clinic of the Department. On oral examination, the ulcers were oval with erythematous margins and pale floor (fig 1). The patient also complained of abdominal pain. She was placed on topical triamcinolone acetonide twice daily for 5 days, low dose systemic steroid tablet, Prednisolone 10mg daily for 5 days followed by 5mg for the next 5 days, tetracycline mouth wash 4 times daily for 5 days, Xylocaine gel and tablets paracetamol 1000mg 3 times daily for 3 days. Patient responded well with healing of the ulcers after the steroid therapy. She was also seen by the gastroenterology unit where she was managed for dyspepsia. She was on omeprazole tablet 20mg twice daily for 2 weeks and suspension Magnesium hydroxide 400mg 10mls 3 times daily for 1 week. However, just after 2 weeks, there was again a recurrence of the oral aphthous ulcers with erosions on the ventral surface of the tongue and the right angle of the mouth (fig 2), white patchy areas on the right buccal mucosa, hyperpigmented, nodulo-papular and target lesions on the skin (fig 3) and genitalial lesions. Prior to this present visit, she had been seen at the gynaecology clinic where she was managed on account of vulvo-vaginitis which was characterized by vaginal discharge, vulvar itching and genital ulcer. We made a diagnosis of Erythema Multiforme major and patient was placed on a higher dose of systemic steroid, tablet Prednisolone 30mg daily for 5 days which was tapered down gradually by 5mg after every five

days, acyclovir tablet 400mg 4 times daily for 5 days and to continue the topical triamcinolone acetonide. There was resultant healing of the oral ulcers and erosions, skin lesions and the genital ulcers after two weeks of treatment. Shortly again, there was another recurrence after 3 weeks with manifestations of lip crusting, sore throat, skin lesions including papular rashes with areas of depigmentation and hyperpigmentation, genitalia ulcerations, conjunctival inflammation with redness, eye pain and poor vision, and associated abdominal pain. Based on these findings and the criteria for diagnosis, we made a diagnosis of Behcet's syndrome. Due to the prolong use of the systemic steroid, patient was alternatively placed on Dapsone 25mg twice daily for 1 week and to continue with the topical triamcinolone acetonide. Patient was also referred to the ophthalmology clinic where she was managed for and uveitis. After the duration of the Dapsone therapy, there was complete resolution of the oral, skin, genital and eye lesions with no recurrence within three months of several recall visits, and patient has still not reported with any complaints after six months of her last recall visits. Figure 4 shows the healed oral ulcers.



Fig 1. Major Aphthous ulcer on the lateral border of the tongue when she was referred for the first time to the oral pathology and oral medicine clinic



Fig 2. Multiple erythemas, ulcers and erosions with crusting on the lower lip presenting 2 weeks after healing of the aphthous ulcer following low dose steroid



Fig 3. Hyperpigmented and erythema nodosum-like skin lesions on the lower extremities also seen 2 weeks after healing of the aphthous ulcer following low dose steroid



Fig 4. Healing of the oral lesions after Dapsone therapy.

DISCUSSION

The clinical characteristics and symptoms are the main factors for diagnosing Behcet's Disease, a specific diagnostic pathognomonic feature or laboratory method is not yet available.¹⁰ Diagnosis of the clinical symptoms is challenging, especially when symptoms are non-concomitant.¹ Diagnosis of Behcet's Syndrome is based on clinical criteria and hence several criteria have been proposed such as that by the international study for Behcet (ISG) in 1990 and the International Criteria for Behcet's Disease (ICBD).^{11,12} In 2012, the international Chapel Hill's 1990 criteria were revised and a new proposal was made.^{1,8} The diagnosis is made by the presence of recurrent oral ulceration (at least three times a year) plus any two of the following: recurrent genital ulceration (leaving scars), ocular lesions (anterior uveitis, posterior uveitis, presence of cells in the vitreous detected in the slit lamp examination, retinal vasculitis), cutaneous lesions (erythema nodosum, pseudofolliculitis or papulopustular lesions, acneiform nodules in patients after adolescence and who are not using corticosteroids), or positive pathergy test results with reading performed 24-48 hours after the test.^{1,8} The prevalence of

Behcet's disease in Nigeria and other parts of sub-Saharan Africa is not fully known owing to the paucity of reported cases of Behcet. However, Poon et al² stated that the prevalence of Behcet's disease is low both in central and West African populations. Although Behcet's disease affects both genders worldwide and in sub-Saharan Africa, most studies have however reported more occurrences in males.^{6,13,14,15} Our patient was a female patient who presented in her fourth decade which is within the age range of between 18 to 40 years stated by Saadoun and Wechsler⁴ but contrast with reports that showed peak incidence in the third decade.^{8,16} Since our report is on a case and due to the rarity of this condition, we cannot conclude on the age and gender pattern in our environment. A case series involving a large number of patients would help to determine the pattern in our environment. This patient had a multidisciplinary treatment involving the oral pathology and oral medicine unit, gastroenterologist, the gynaecologist and the ophthalmologist. Management of Behcet's syndrome is a multidisciplinary approach to reduce morbidity and mortality.^{9,16} Behcet's disease responds to corticosteroids and immunosuppressive therapy.^{1,15,16} The beneficial effects of Dapsone have been reported.¹⁷ Sharquie et al¹⁸ investigated the effect of Dapsone in the treatment of mucocutaneous manifestations of Behcet's disease and the possible prophylactic role of Dapsone in a double blind/placebo controlled clinical trial involving 20 patients. Those that had Dapsone had a significant reduction in the frequency and duration of oral and genital ulcers than those on placebo. Dapsone inhibits the enhanced chemotactic activity of neutrophils.¹⁹ Hemolytic anemia and methemoglobinemia, which can be severe in patients with glucose-6-phosphate dehydrogenase deficiency, are the main side effects, which may significantly limit their use.¹⁹ The patient in the present study presented with no adverse reactions to the use of Dapsone.

Some differential diagnosis of Behcet's syndrome at different stages of manifestations includes recurrent aphthous stomatitis, recurrent herpetic

stomatitis, erythema multiforme, Steven Johnson syndrome and complex aphthosis. Recurrent Aphthous Stomatitis occurs in patients who are otherwise well, affecting the oral mucosa and characterized by oval ulcers with erythematous margins.²⁰ In Recurrent herpetic stomatitis, patient would have given a history of fluid filled vesicle formation that ruptured. The individual lesions begin as vesicles on mucocutaneous areas which quickly burst, leaving punctate ulceration with an erythematous base.²¹ The most common type of recurrent herpetic stomatitis are presence of small blisters on the lips commonly referred to as fever blisters or secondary herpes stomatitis which affects mostly the lips.²² Hypersensitivity reactions like Erythema multiforme show crusting and haemorrhagic ulceration with multiple erythematous patches on the lip and oral mucosa with target lesions on the skin.²³ A more severe spectrum of erythema multiforme, the Steven Johnson's syndrome is a hypersensitivity reaction affecting mucocutaneous surfaces characterized by nonspecific febrile illness (malaise, headache, cough, rhinorrhea) with polymorphic lesions of skin and mucous membrane showing acute blisters and erosions.²⁴ Behcet's disease is a much more severe disease than complex aphthosis. Complex aphthosis is an uncommon, persistent, chronic type of recurrent aphthous stomatitis which may also be associated with systemic diseases and patients may also have anogenital apthae.²⁵

In conclusion, we report a case of Behcet's syndrome, a rare clinical condition that affected the oral mucosa, the conjunctiva, the skin, the genitalia and gastrointestinal tract in a 36 year-old female that presented to us initially with just recurrent aphthous ulcers only. There was positive response after the use of corticosteroid initially and Dapsone treatment afterwards. Healthcare professionals should be aware of the clinical features of this rare condition to enable prompt diagnosis and adequate treatment. Since all the symptoms may sometimes not manifest at the same time, a meticulous history taking and thorough clinical examination of other body sites is advised when patients present only with oral

ulcers at any point as seen in our case. This will help prevent a misdiagnosis of this condition.

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