1 RecurrentPeripheral Facial ParalysisRevealingBehçet'sDisease: A Case Report

2 Abstract

- 3 We report the case of a 21-year-old female patient presenting with recurrent peripheral facial
- 4 paralysisassociatedwithoropharyngealaphthosis and diffuse arthralgia.
- 5 Immunologicaltestingrevealed HLA-B51 positivity, suggestingBehçet's disease. The patient's
- 6 condition improved with a combination of corticosteroid therapy, colchicine,
- 7 functional rehabilitation, and symptomatic measures.

8 Key Words

9 Behçet'sdisease – Recurrent facial paralysis – Neuro-Behçet – HLA-B51

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11 Introduction

- Behçet'sdisease (BD) is a chronic, relapsing, multisysteminflammatorydisordercharacterized
- by recurrent oral and genitalulcers, ocularinvolvement, and variable systemic manifestations.
- 14 It is classified among the variable vesselvasculitides, as it can affect both arteries and veins of all
- 15 calibers. Although the exact etiologyremainsunclear, an
- interaction between genetic predisposition particularly HLA-B51 positivity and environmental or
- 17 infectious triggers issuspected.
- Neurologicalinvolvement, termedneuro-Behçet's disease, occurs in approximately 5–10% of
- 19 cases and represents one of the mostsevere complications. It can manifest as
- 20 parenchymallesionsinvolving the brainstem or as vascular complications such as
- 21 cerebralvenousthrombosis. Peripheralnervous system involvement, however,
- 22 remainsexceptional.
- Peripheral facial paralysisis a commonneurological disorder, most often idiopathic or post-viral
- 24 in origin. Its recurrences hould prompt investigation for an underlying systemic disease. We
- 25 report here an unusualpresentation of Behçet's disease revealed by recurrent peripheral facial
- paralysis in a youngwoman, emphasizing the importance of multidisciplinary evaluation and
- early recognition of atypical forms.

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Case Report

- 31 Ms. M. M., a 21-year-old womanwith no significant medical history, experienced a right-
- 32 sidedperipheral facial paralysisthreemonthsearlier, whichhad been attributed to idiopathic
- 33 (cold-induced) Bell'spalsy. Her condition hadimprovedundercorticosteroidtherapy and
- 34 physicalrehabilitation.
- 35 Threemonthslater, shepresented again with a recurrence of the same facial deficit.
- 36 Clinicalexaminationrevealed a complete right-sidedperipheral facial paralysis (House-
- 37 Brackmann grade IV), with no involvement of othercranial nerves. ENT
- examinationidentified a single aphthousulcerlocated on the right tonsillarfossa. The patient

- 39 alsoreportedmigratorypolyarthralgia, mainlyaffecting the knees and wrists, withoutswelling or
- 40 local inflammatorysigns.
- 41 Laboratoryworkupshowed: normal CBC, erythrocytesedimentation rate (ESR) of 28 mm in
- 42 the first hour, nearly normal C-reactive protein (CRP), and positive HLA-B51. Brain MRI
- 43 wasstrictly normal, showing no brainsteminvolvement or inflammatorylesions.
- 44 Ophthalmologicexaminationrevealed no uveitis or retinalinvolvement.

Discussion

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- 46 Peripheral facial paralysisis one of the mostcommonreasons for ENT consultations. It
- 47 isusuallyidiopathic or post-viral. However, recurrence of such an episodewithina short period
- 48 in a young patient should prompt consideration of a systemicetiology.
- 49 In this case, the presence of oropharyngealaphthosis, polyarthralgia, and HLA-B51
- 50 positivityled to the diagnosis of Behçet's disease. This
- 51 chronicsystemicvasculitispredominantly affects youngadults and isclassically characterized by
- 52 the triad of oral aphthosis, genitalaphthosis, and uveitis
- Neurologicalinvolvement in Behçet's disease is rare but severe, occurring in approximately 5–
- 54 10% of cases, and maybeeitherparenchymal or vascular. In our observation, the absence of
- 55 brain MRI lesionsruled out central nervous system involvement but
- 56 suggestedinflammatoryperipheral damage to the facial nerve.
- 57 This case highlights the importance of acomprehensive approach and multidisciplinary follow-
- 58 up in patients presenting with recurrent facial paralysis.
- 59 The patient wastreated with colchicine (1 mg/day) to control systemic inflammation, low-dose
- oral corticosteroids to reduce facial nerve edema, vitamin B12 to support nerve regeneration,
- and artificialtears for ocular protection. Functionalrehabilitation sessions were prescribed to
- 62 acceleraterecovery of facial motility.
- 63 Clinical evolution was favorable after two weeks, with progressive recovery of facial movement
- and disappearance of joint pain. No recurrence was observed after three months of follow-up.

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Conclusion

- 69 Behçet's disease should be considered in any case of recurrent facial paralysis associated with
- 70 oral aphthosis. Early recognition of thisetiologyallows for targeted management and
- 71 prevention of severeneurological or ocular complications. This case underscores the
- 72 importance of aholisticclinical approach and close collaboration between ENT specialists,
- 73 internists, and ophthalmologists in the management of suchatypical presentations.

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