Case Report

DOI: 10.14235/bas.galenos.2025.58751
Bezmialem Science 2026;14(2):201-203

Recurrent Facial Palsy and Fissured Tongue in an Adolescent: A Case of Melkersson-Rosenthal Syndrome

Ergenlik Döneminde Tekrarlayan Yüz Felci ve Fissürlü Dil: Melkersson-Rosenthal Sendromu Olgusu

Hasan Burak KAYACI[1], Celal ŞALÇİNİ[2]

[1]Üsküdar University Faculty of Medicine, Department of Neurology, İstanbul, Türkiye
[2]NPİstanbul Brain Hospital, Clinic of Neurology, İstanbul, Türkiye

ABSTRACT

Melkersson-Rosenthal syndrome (MRS) is a rare neuromucocutaneous disorder characterized by recurrent facial palsy, orofacial swelling, and fissured tongue (lingua plicata). This case report presented a 16-year-old male who experienced his fourth episode of sudden-onset unilateral facial paralysis. Neurological examination revealed lower motor neuron-type facial weakness and a markedly enlarged tongue with deep fissures. Laboratory tests and imaging studies, including brain magnetic resonance imaging and systemic evaluations, were all within normal limits. Based on the presence of the classic clinical triad and the exclusion of other potential causes, a diagnosis of MRS was made. The patient responded well to corticosteroid therapy.

Keywords: Melkersson-Rosenthal syndrome, recurrent facial nerve palsy, lingua plicata, orofacial granulomatous disease

ÖZ

Melkersson-Rosenthal sendromu (MRS), tekrarlayan yüz felci, orofasiyal şişlik ve fissürlü dil (lingua plicata) ile karakterize, nadir görülen nöromukokutanöz bir hastalıktır. Bu olgu sunumunda, dördüncü kez ani başlayan tek taraflı yüz felci atağı yaşayan 16 yaşındaki bir erkek hasta sunuldu. Nörolojik muayenede alt motor nöron tipinde yüz felci ve derin fissürlere sahip bir dil saptandı. Beyin manyetik rezonans görüntülemesi ve sistemik değerlendirmeleri de dahil olmak üzere laboratuvar testleri ve görüntüleme incelemeleri normal sınırlarda bulundu. Klasik klinik üçlü belirtinin varlığı ve diğer olası nedenlerin dışlanmasıyla MRS tanısı kondu. Hasta, kortikosteroid tedavisine iyi yanıt verdi.

Anahtar Kelimeler: Melkersson-Rosenthal sendromu, tekrarlayan fasiyal sinir felci, fissürlü dil, orofasiyal granülomatöz hastalık

Introduction

Melkersson-Rosenthal syndrome (MRS) is a rare neuromucocutaneous disorder, typically characterized by recurrent facial palsy, facial or lip swelling, and lingua plicata. Fewer than a third of patients present with all three symptoms and in most cases, symptoms occur progressively or partially (1-3).

The condition often begins in childhood or adolescence and follows a relapsing-remitting course. Swelling may resolve within hours or days initially, but may later become more persistent and even permanent due to granulomatous lymphatic obstruction. Meanwhile, facial palsy episodes are often temporary but may recur. Lingua plicata is usually asymptomatic and detected on physical examination (3,4).

Although the etiology is unclear, proposed causes include genetic predisposition, familial clustering and possible chromosomal associations, immune dysregulation, and associations with Crohn's disease, sarcoidosis, or orofacial

Address for Correspondence: Res. Assist. Hasan Burak Kayacı, Üsküdar University Faculty of Medicine, Department of Neurology, İstanbul, Türkiye
E-mail: hasanburakkayaci@gmail.com
ORCID IDs of the authors: H.B.K.: 0009-0000-3956-3335, C.Ş.: 0000-0002-4489-4400

Cite this article as: Kayacı HB, Şalçini C. Recurrent facial palsy and fissured tongue in an adolescent: a case of Melkersson-Rosenthal syndrome. Bezmialem Science. 2026;14(2):201-203

Received: 28.03.2025
Accepted: 07.10.2025
Epub: 24.03.2026
Published date: 20.04.2026

granulomatosis triggered by hormonal changes have been reported in studies (5).

Diagnosis is made clinically, supported by ruling out infectious, neoplastic, or demyelinating causes. Imaging findings are typically normal, though in rare cases granulomatous inflammation may be detected (6).

Treatment is symptomatic. Systemic corticosteroids are generally the first line of therapy, while immunosuppressants or biologics like methotrexate or anti-tumor necrosis factor agents are considered in chronic or recurrent cases (3,6). Surgical intervention is rarely required but may be considered for cosmetic deformity or chronic edema (2,6).

Case Report

A 16-year-old male presented with left-sided facial palsy, which had developed suddenly over the course of one day. This was his fourth episode of unilateral facial weakness within the past three years. Each episode had previously responded well to a short course of corticosteroids, with near-complete recovery. He reported no other systemic symptoms, no recent infections, trauma, or vaccination.

Neurological examination revealed lower motor neuron-type facial weakness, impaired eye closure, and asymmetry of the mouth. Additionally, his tongue appeared firm, enlarged, and showed characteristic deep fissures (lingua plicata) (Figure 1).

Laboratory studies including vasculitis panel, acute phase reactants, and viral serologies (herpes simplex virus, Epstein-Barr virus, cytomegalovirus) were all within normal limits. Magnetic resonance imaging (MRI) of the brain and brainstem, as well as MRA, revealed no structural or inflammatory abnormalities. A chest computed tomography and gastrointestinal consultation were conducted to evaluate for systemic granulomatous diseases; both were normal.

The clinical triad of recurrent facial nerve palsy, orofacial swelling, and fissured tongue led to the diagnosis of MRS, a rare granulomatous disorder characterized by the classic triad of orofacial swelling, recurrent facial palsy, and fissured tongue (2,6).

Informed consent was obtained from the participant for the study.

Discussion

MRS should be suspected in adolescents with recurrent facial palsy, especially when accompanied by lip/tongue swelling or fissured tongue. A normal MRI and laboratory work-up help exclude mimics such as multiple sclerosis, vasculitis, or infectious cranial neuritis.

Our patient displayed all Bell's palsy diagnostic criteria along with fissured tongue. The wide range of conditions which may present as MRS includes thyroid orbitopathy and allergic reactions and angioedema and bacterial and viral and filarial infections and systemic lupus erythematosus and dermatomyositis and Bell's palsy itself and Ramsay Hunt syndrome (7). This situation didn't require a biopsy to confirm MRS diagnosis because all classic signs were present. The oral manifestations of Crohn's disease and other inflammatory bowel diseases include lip swelling with fissures as well as mucositis and gingivitis and glossitis and the characteristic cobblestone appearance of oral mucosa (8). The available scientific evidence indicates that abnormal immune responses along with immune system imbalances and allergic tendencies affect people who develop MRS. The current medical literature does not identify any definitive treatment for this condition despite its management using short-term immunosuppressive medication (8). Medical practitioners use corticosteroids as initial treatment for MRS by administering them through injection into the lesion or systemically while decreasing medication doses over 3-6 weeks based on patient symptoms. Research shows that corticosteroid treatment leads to symptom improvement in 50-80% of patients while reducing the chance of reoccurrence to 60-75% (9). The treatment plan for this patient included methylprednisolone medication together with eye care for the affected side and physical therapy for

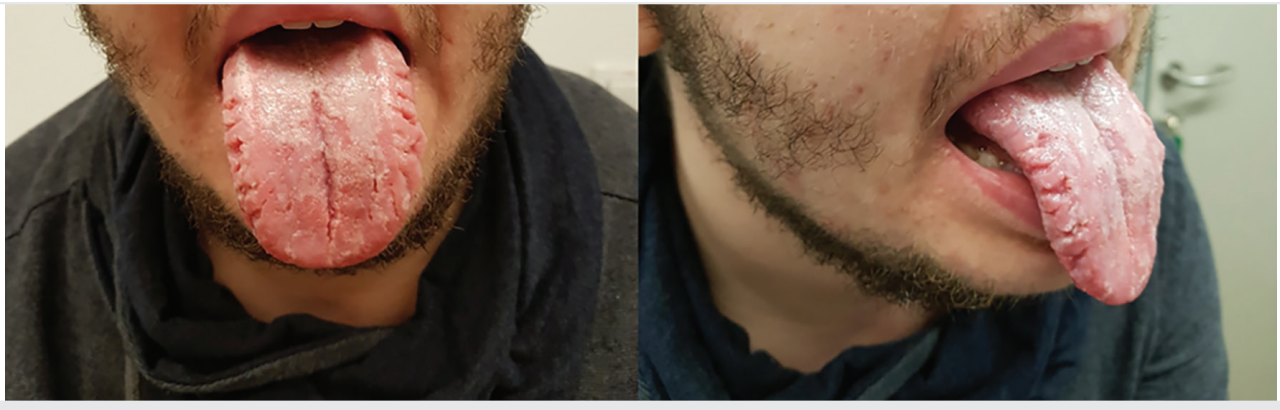

Figure 1. Characteristic deep fissures of the tongue (lingua plicata)

facial palsy rehabilitation. The symptomatic treatment of eye care benefits from additional vitamins such as thiamine and niacin and riboflavin and pyridoxine and ascorbic acid and vitamin E. The treatment requires daily lubricating drop applications combined with overnight protective eye pad use because the eye can't be closed completely. The recovery of facial palsy benefits from physical therapies that include exercise together with biofeedback and electrotherapy and massage and thermotherapy.

Ethics

Informed Consent: Informed consent was obtained from the participant for the study.

Footnotes

Authorship Contributions

Surgical and Medical Practices: C.Ş., Concept: H.B.K., C.Ş., Design: H.B.K., C.Ş., Data Collection or Processing: C.Ş., Analysis or Interpretation: H.B.K., C.Ş., Literature Search: H.B.K., C.Ş., Writing: H.B.K.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. Hornstein OP, Stosiek N, Schönberger A, Meisel-Stosiek M. Klassifikation und klinische variationsbreite des Melkersson-Rosenthal-Syndroms (MRS) [Classification and scope of clinical variations of Melkersson-Rosenthal syndrome]. Z Hautkr. 1987;62:1453-66, 1471-5. German.
2. Greene RM, Rogers RS 3rd. Melkersson-Rosenthal syndrome: a review of 36 patients. J Am Acad Dermatol. 1989;21:1263-70.
3. Liu R, Yu S. Melkersson-Rosenthal syndrome: a review of seven patients. J Clin Neurosci. 2013;20:993-5.
4. Mansour M, Mahmoud MB, A Kacem, Zaouali J, Mrissa R. Melkersson-Rosenthal syndrome: about a Tunisian family and review of the literature. Clin Neurol Neurosurg. 2019;185:105457.
5. Pei Y, Beaman GM, Mansfield D, Clayton-Smith J, Stewart M, Newman WG. Clinical and genetic heterogeneity in Melkersson-Rosenthal syndrome. Eur J Med Genet. 2019;62:103536.
6. Zimmer WM, Rogers RS 3rd, Reeve CM, Sheridan PJ. Orofacial manifestations of Melkersson-Rosenthal syndrome. A study of 42 patients and review of 220 cases from the literature. Oral Surg Oral Med Oral Pathol. 1992;74:610-9.
7. Ferro JM, Oliveira SN, Correia L. Neurologic manifestations of inflammatory bowel diseases. Handb Clin Neurol. 2014;120:595-605.
8. Dhawan SR, Saini AG, Singhi PD. Management strategies of Melkersson-Rosenthal syndrome: a review. Int J Gen Med. 2020;13:61-5.
9. Lee YJ, Cheon CK, Yeon GM, Kim YM, Nam SO. Melkersson-Rosenthal syndrome with Hashimoto thyroiditis in a 9-year-old girl: an autoimmune disorder. Pediatr Neurol. 2014;50:503-6.