

CLINICAL CASES

Cheilitis granulomatosa of Melkersson-Rosenthal syndrome: Treatment with intralesional corticosteroid injections

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ABSTRACT

Background: Melkersson–Rosenthal syndrome may manifest as the classical triad (orofacial edema, facial nerve palsy and stable lingua plicata) but monosymptomatic manifestations or combinations of typical symptoms are not infrequent. The available therapeutic options provide only limited success or temporary benefit.

Case report: A 20-year-old man presented with a 7-month history of recurrent episodes of swelling of the upper lip without pain, burning or local pruritus. No causative factors, such as food, drugs or latex, or physical, chemical or emotional conditions could be identified. The patient had been treated with oral antihistamines and corticosteroids with no clinical improvement. Physical examination showed firm edema without fovea, limited to the central area of the upper lip without epidermal changes or symptoms on palpation. The patient had a previous history of facial palsy 6 years previously and recurrent episodes of herpes simplex labialis.

Skin prick tests with inhalant aeroallergens, food, latex and *Anisakis* allergens were negative. Laboratory investigation revealed normal complete blood count, erythrocyte sedimentation rate, thyroid hormones, biochemistry, complement components (C3, C4 and C1-esterase inhibitor) and CH50, rheumatoid factor, antinuclear antibodies, immune complexes, protein electrophoresis and immunoglobulins. Thorax and paranasal sinus radiographs were clear. Biopsy of the involved area of the lip showed edema with lymphocytic and plasma cell infiltration and mononuclear perivascular infiltrates without granulomas, suggesting initial granulomatous cheilitis.

Because the patient showed lack of response and/or poor tolerance to prior treatments (deflazacort, clobazimine and metronidazole), intralesional triamcinolone injections were administered with satisfactory response from the first session.

Conclusions: Response to available treatments for Melkersson-Rosenthal syndrome is highly variable. In the present case, intralesional triamcinolone injections were effective.

Key words: Angioedema. Cheilitis. Glucocorticoids. Injections. Intralesional. Melkersson-Rosenthal syndrome. Cheilitis. Triamcinolone.

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RESUMEN

Introducción: El síndrome de Melkersson-Rosenthal puede presentarse como la clásica tríada (angioedema, parálisis facial y lengua plicata), pero no es infrecuente que aparezcan formas monosintomáticas y combinaciones de los sín-

tomas típicos. Las opciones terapéuticas disponibles ofrecen una mejoría parcial o transitoria.

Caso clínico: Paciente varón de 20 años de edad que refiere un aumento de tamaño del labio superior de 7 meses de evolución, sin dolor, quemazón ni prurito local. No lo relaciona con la ingesta de fármacos, alimentos, factores físicos, emocionales ni manipulación de látex. El cuadro tiene periodos de exacerbaciones y mejoría. Ha realizado tratamiento con antihistamínicos y corticoides orales, persistiendo siempre un edema residual. A la exploración se apreciaba edema sin fovea, firme, elástico, fundamentalmente en la zona central del labio superior, sin cambios epidérmicos y asintomático a la palpación. Como antecedentes, refería un episodio de parálisis facial 6 años antes y herpes labial recurrente.

Los tests cutáneos mediante prick-test con neuroalergenos inhalantes, alimentos y extractos de látex y *Anisakis* fueron negativos. No se detectaron alteraciones en el hemograma, VSG, hormonas tiroideas, bioquímica, C3, C4, CH50, C1 inhibidor, actividad del C1 inhibidor, serología reumática, ANA, inmunocomplejos circulantes, proteinograma e inmunoglobulinas. El estudio radiológico de tórax y senos paranasales fue normal. El estudio histológico de la muestra obtenida del labio superior mostraba un infiltrado perivascular de linfocitos y células plasmáticas compatible con queilitis granulomatosa en fase inicial.

Ante la falta de respuesta y/o mala tolerancia de los tratamientos previos (deflazacort, clofazimina y metronidazol) se optó por realizar infiltraciones locales con triamcinolona acetónido, con respuesta satisfactoria desde la primera sesión.

Conclusiones: La respuesta de los síntomas del síndrome de Melkersson-Rosenthal a las medidas terapéuticas disponibles es muy variable. En nuestro caso, la inyección intralesional de corticoides ha resultado eficaz.

Palabras clave: Angioedema. Glucocorticoides. Inyección. Intralesional. Melkersson-Rosenthal. Queilitis. Triamcinolona.

INTRODUCTION

The classic triad of Melkersson-Rosenthal syndrome (MRS) (orofacial edema, facial nerve palsy and stable lingua plicata) represents only a minor proportion of all cases. The most dominant feature is orofacial edema. Many therapeutic approaches have been suggested but most of them have demonstrated only limited success or temporary benefit^{1,2}.

CASE REPORT

A 20-year-old man presented with recurrent labial swelling episodes for 7 months with painless, non pruritic and permanent edema. No provocative factors, such as food, drugs, latex, physical, chemical or psychic conditions could be identified. The patient had been treated with oral antihistamines and corticosteroids with no clinical improvement. Physical examination showed firm edema limited to the upper lip and slight macroglossia. The patient had a previous history of facial palsy 6 years before and recurrent episodes of herpes simplex labialis. Laboratory investigation revealed normal complete blood count, differential, erythrocyte sedimentation rate, urinalysis, biochemistry (liver and renal function tests, thyroid hormones and electrolytes), immune complexes, C-reactive protein, antistreptolysin, rheumatoid factor, antinuclear antibodies, protein electrophoresis, complement components (C3, C4 and C1-esterase inhibitor) and CH50. Thorax and paranasal sinus radiographies were clear. Skin testing to inhalant, food, latex and *Anisakis* allergens was negative. Biopsy of the involved lip showed edema with lymphocytic and plasma cell infiltration and mononuclear perivascular infiltrates without granulomas, suggesting initial granulomatous cheilitis. The patient was treated with deflazacort and clofazimine during 4 months with no clinical improvement. After that, he began treatment with metronidazole. Although it improved the edema, it had to be discontinued because of gastric adverse effects. Finally, intralesional triamcinolone injections (5 mg in 4 points) were administered with a successful outcome. After the first administration, we observed a reduction of the lip size with an important improvement after a second administration 2 months later. Lip size remained reduced for over 10 months.

DISCUSSION

In differential diagnosis of angioedema, in addition to usual causes, the allergist needs to consider MRS, which can present with a variety of symptom combinations of the classic triad^{1,2}.

MRS usually begins in the second decade of life. The cause of this illness is unknown, but there may be a genetic predisposition. There is no convincing evidence that MRS is caused by an infective agent such as *Toxoplasma gondii*, *Treponema pallidum*, *Borrelia burgdorferi*, mycobacteria or herpes simplex virus. Some investigators have tried to link the syndrome to sarcoidosis or Crohn disease but this hypothesis has not been confirmed.

Spontaneous remission of MRS has been reported. The elimination of odontogenic infections has relieved swelling in some patients, and a few patients have been reported to have food or food additive intolerance to cinnamadehyde, carnosine, monosodium glutamate, cocoa, carbone, or sunset yellow².

The histology of biopsy specimens of patients with MRS may vary depending on the severity and duration of the lesions and may present with 3 types of histopathology: 2 types of noncaseating granulomata and non-specific inflammation¹.

As the etiology of this disorder remains unknown multiple therapeutic approaches have been administered, most of them with limited success or temporary benefit: antibiotics, antiinflammatory drugs, antihistamines, corticosteroids (oral and intralesional injections), low allergen- or elimination diets, clofazimine, danazol, hydroxychloroquine, salazosulfapyridine, metronidazole, radiotherapy, facial physiotherapy, electrostimulation, and laser acupuncture. Treatment with sulfasalazine, cotrimoxazole, azathioprine, and cyclosporine A has been disappointing¹.

For the treatment of our patient we used intralesional triamcinolone injections despite the lack of recovery or side effects with previous treatments. This treatment has been recommended after surgery to minimize the tendency to recurrence³ or as alone therapy⁴⁻⁸. There are a few number of patients in the literature treated with this procedure with different results. In most of patients this treatment reduces lip swelling, and in some of them lip size returns to normal⁴⁻⁸. The possibility of recurrences has to be taken into account, but the response to intralesional injections of triamcinolone is usually evident

within few days with no long-term side effects. In our case, the patient responded to this treatment successfully.

CONCLUSIONS

The management of cheilitis granulomatosa remains a challenge. We report a case of granulomatous cheilitis treated with intralesional triamcinolone injections as the best option of therapeutic possibilities.

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