

Single-Stage Surgical Reconstruction in a Case of Rare Isolated Periorbital Cutaneous Sarcoidosis without Systemic or Orbital Involvement

Narendra S. Mashalkar¹

¹ Department of Plastic Surgery and Burns, St. John's Medical College, Bengaluru, Karnataka, India

Indian J Plast Surg 2023;56:189–190.

Address for correspondence Narendra S. Mashalkar, MBBS, MS, MCh, Department of Plastic Surgery and Burns, St John's Medical College, Bengaluru 560034, Karnataka, India (e-mail: plasticnaren2005@yahoo.co.in).

Making an initial clinical diagnosis of sarcoidosis in an isolated periorbital swelling with mechanical obstruction of vision is challenging for a plastic surgeon and warrants a teamwork. Arriving at a definitive diagnosis post reconstruction, not in the list of common clinical differential diagnosis, brings a sense of surprise, fear of possibility of recurrence, and confusion regarding initial and further management. A 70-year-old hypertensive and hypothyroid male on medications presented with the left peri orbital region diffuse swelling involving, upper and lower eyelids with complete obstruction of vision since 3 years (► **Fig. 1**), Magnetic resonance imaging (MRI) with contrast revealed neurilemmoma with no intra orbital or cranial extension. He underwent debulking of excessive skin with underlying soft tissue in a plane above the orbicularis oculi

muscles, the muscles appeared normal, primary closure would result in significant tension with ectropion deformity; hence, a split-thickness skin graft for the upper eyelid and full-thickness skin graft for lower eyelid was planned and resurfaced (► **Fig. 2**). Postoperative period showed a good graft take and histopathology diagnosis showed sarcoidosis with non-caseating giant cell granulomas. He was later referred to immunology and was initiated on oral steroids. The patient was taught about upper eyelid closure exercises (► **Figs. 3 and 4**). Sarcoidosis, a chronic granulomatous disease of which, cutaneous sarcoidosis is typically categorized into isolated cutaneous



Fig. 1 Preoperative image.



Fig. 2 Postoperative image.

article published online
December 16, 2022

DOI <https://doi.org/10.1055/s-0042-1759693>.
ISSN 0970-0358.

© 2022. Association of Plastic Surgeons of India. All rights reserved. This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial-License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India



Fig. 3 8 weeks postoperative image eyelid opened.



Fig. 4 8 weeks postoperative image eyelid closed.

sarcoidosis and cutaneous manifestations associated with systemic sarcoidosis, e.g., pulmonary sarcoidosis.¹ Sarcoidosis can affect any organ, and diagnosing this disease remains a challenge.^{2,3} Ocular sarcoidosis can involve any part of the eye, eyelid being one of its targets.⁴ Clinical presentations are varied in symptoms and severity, and a multi-disciplinary approach is the fundamental requirement to get optimum result and prevent recurrence.⁴ Our case presentation is similar to that of Lee et al, wherein patient presented with diffuse periorbital swelling without any palpable mass.⁵ We had a differential diagnosis of venous malformation and myxedema, which has been ruled out by MRI with contrast. We performed surgical debulking with appropriate resurfacing of the created defect for upper and lower eyelids; Lee et al have also done curative surgical debulking with oral steroids being administered to patients.⁵ We conclude that arriving at a definitive diagnosis before performing any reconstructive surgery with team approach is essential, as this would lead to the initiation of optimum medical therapy in the preoperative period to prevent recurrence of the disease.

Funding

None.

Conflict of Interest

None declared.

References

- 1 Ungprasert P, Wetter DA, Crowson CS, Matteson EL. Epidemiology of cutaneous sarcoidosis, 1976-2013: a population-based study from Olmsted County, Minnesota. *J Eur Acad Dermatol Venereol* 2016;30(10):1799-1804
- 2 Thomas KW, Hunninghake GW. Sarcoidosis. *JAMA* 2003;289(24):3300-3303
- 3 Chen ES, Moller DR. Etiology of sarcoidosis. *Clin Chest Med* 2008;29(03):365-377, vii
- 4 Pasadhika S, Rosenbaum JT. Ocular sarcoidosis. *Clin Chest Med* 2015;36(04):669-683
- 5 Lee JK, Moon NJ. Orbital sarcoidosis presenting as diffuse swelling of the lower eyelid. *Korean J Ophthalmol* 2013;27(01):52-54