Case Report

Clinical Case: Scleromalacia Perforans in a 60-Year-Old Woman with Rheumatoid Arthritis

Yassmine Bensaoud*, Zineb Saif, Yasmine Nejjar, Brarou Houda, Belmlih Mounir and Yassine Mouzari

Ophthalmology Department, Specialty Hospital, Rabat, Morocco

*Corresponsing author: Yassmine Bensaoud, Ophthalmology Department, Specialty Hospital, Rabat, Morocco

Email: bnsdyassmine@gmail.com Received: November 08, 2025 Accepted: December 10, 2025 Published: December 15, 2025

Introduction

Scleromalacia perforans is a rare but serious complication of rheumatoid arthritis (RA), characterized by progressive thinning of the sclera without obvious inflammation. It reflects severe vasculitic involvement and can threaten ocular integrity. This condition mainly affects elderly women with long-standing, seropositive RA. We report a case of scleromalacia perforans in a 60-year-old woman followed for rheumatoid arthritis.

Clinical Observation

A 60-year-old woman, followed for seropositive rheumatoid arthritis for 15 years, presented with progressive visual discomfort and mild blurring in the right eye. She also reported chronic bilateral dryness.

Ophthalmologic examination revealed visual acuity of 8/10 in the right eye and 10/10 in the left eye. The anterior segment of the right eye showed a temporal scleral thinning zone of about 3 mm, oval-shaped, well-defined, with underlying choroidal show-through, but no hyperemia or inflammation. The left eye showed mild nasal thinning. There were no signs of uveitis or episcleritis. The Schirmer test was 2 mm/5 min bilaterally, indicating severe dryness. Fundus examination was normal in both eyes (Figure 1).



Figure 1: Temporal scleral thinning zone of about 3 mm, oval-shaped, well-defined, with underlying choroidal show-through.

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Laboratory tests showed elevated rheumatoid factor (RF) and anti-CCP antibodies with mildly increased ESR and CRP. Ocular ultrasound confirmed scleral thinning without choroidal detachment or abscess. Orbital MRI confirmed localized scleral atrophy without active inflammation [1,2].

Management

The patient was maintained on methotrexate (15 mg/week) and started on oral corticosteroids (prednisone 0.5 mg/kg/day). Intensive ocular lubrication with preservative-free artificial tears was initiated. In collaboration with the rheumatologist, adalimumab (40 mg every 2 weeks) was introduced due to ocular progression. Monthly ophthalmologic follow-up was arranged [3-5].

Evolution

After three months of combined therapy, the scleral lesion stabilized without perforation or worsening of thinning. The left eye remained stable. Visual acuity remained 8/10 in the right eye and 10/10 in the left eye, with improved comfort.

Discussion

Scleromalacia perforans is a necrotizing, non-inflammatory form of scleritis, occurring almost exclusively in patients with rheumatoid arthritis. It results from chronic necrotizing vasculitis of the sclera due to immune complex deposition and local ischemia. It typically affects women over 50 years old with long-standing, severe RA. The condition is usually painless, distinguishing it from inflammatory scleritis, but can progress to scleral perforation and vision loss if untreated [6]. Treatment is based on systemic immunosuppression (methotrexate, azathioprine, cyclophosphamide, or anti-TNF agents). Controlling

the underlying RA is essential to prevent progression. Topical therapy includes lubrication and protection; scleral grafting may be needed in advanced cases [7]. Prognosis depends on systemic disease control. Without immunosuppressive therapy, evolution may lead to ocular perforation and permanent visual loss. Multidisciplinary management between ophthalmologists and rheumatologists is therefore crucial.

Conclusion

Scleromalacia perforans is a severe ocular manifestation of rheumatoid arthritis indicating vasculitic involvement. Regular ophthalmologic screening in long-standing RA patients is essential for early diagnosis. Combined management with rheumatologists can prevent irreversible ocular complications.

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