

When joints cost sight – vision loss in rheumatoid arthritis

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Key words: rheumatoid arthritis, dry eye syndrome, ophthalmic complications

Introduction: Rheumatoid arthritis (RA) is a chronic, systemic autoimmune disease primarily affecting synovial joints. Ocular involvement is among the most important extra-articular manifestations of RA. The most common ophthalmic manifestation is dry eye syndrome in the course of secondary Sjögren's disease. Necrotic scleritis and peripheral ulcerative keratitis are particularly aggressive inflammatory processes that may lead to corneal thinning, perforation and irreversible vision loss.

Case description: An 88-year-old woman has been under the care of the Department of Ophthalmology for 24 years. In 2002, she presented on an emergency duty for ophthalmologic consultation due to a corneal ulcer in the right eye complicated by subsequent corneal perforation. The condition developed in the course of severe dry eye syndrome secondary to RA.

During the course of her medical history, the patient underwent 5 procedures involving the transplantation of human amniotic membrane onto the cornea in the right eye and 3 in the left eye, as well as 5 penetrating corneal transplantation in the left eye and 2 in the right eye.

Despite numerous attempts to improve visual acuity, a satisfactory visual outcome has not been achieved. However, preservation of both eyeballs and low visual acuity was maintained. Each surgical intervention was complicated by impaired wound healing and recurrent corneal ulcerations. The patient has been on long-term systemic treatment for rheumatoid arthritis and, following high-risk corneal grafts, required systemic glucocorticosteroid and immunosuppressive therapy. This may have contributed to other systemic complications, including myocardial infarction, mesenteric infarction with intestinal perforation, and lower limb ischemia, that occurred during the patients long term follow-up. The above-mentioned complications may also be attributable to advanced autoimmune disease.

Conclusions: Despite advances in disease-modifying drugs and biological drugs, severe ophthalmic complications remain a clinical challenge. Early and close cooperation between a rheumatologist and an ophthalmologist is crucial to prevent catastrophic outcomes. Rheumatoid arthritis is one of the autoimmune diseases that may lead to irreversible vision loss.