Ocular manifestation in gout: an unusual presentation of gout

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Presentation

A 39-year-old previously healthy male presented with left ocular erythema, painless scleral injection, and nasal-labial pressure persisting for 2 months. He denied eyelid pain, ocular rotation discomfort, visual changes, or visual debris. He endorsed episodic joint pain and swelling, primarily at the left ankle and midfoot. These episodes were associated with skin erythema and difficulty walking. Patient denied any rheumatologic history, including gout. Physical examination is described in Fig. 1. Laboratory workup revealed a negative rheumatoid factor, normal C3, C4, and complement CH50, nonreactive treponemal antibody, negative nuclear antibody, neutrophil cytoplasmic antibody, myeloperoxidase antibody, proteinase 3 ab, C-ANCA, P-ANCA, and complete blood count were within normal limits. Creatine 1 mg/dl, creatine clearance 120.9 mL/min, and uric acid were elevated at 7.6 mg/dL. Gout was diagnosed based on 8 points on the ACR/EULAR gout criteria. Therapy was started with indomethacin 50 mg TID for 5 days, followed by a course of 25 mg TID for 10 days. Topical optical and urate-lowering

medications were not started for this first attack. He had complete resolution within 1 week.

Discussion

Ocular manifestations of gout are unusual and diverse [1]. Urate crystal deposition can cause ocular surface abnormalities, such as vascular changes, tophi deposition, conjunctival hemorrhage, and sub-conjunctival transparent vesicles [2]. These clinical manifestations are often symptomatically treated with no further laboratory workup. Episcleral involvement has been reported to manifest as either nodular or recurrent episcleritis [3]. Antibiotics are often the first choice for potential infectious etiology, but this patient's episodic joint pains in combination with ocular involvement lead to a broadening of the differential to include rheumatological causes, such as ocular manifestations of gout. Possibly the cause of this scleritis may be overlooked in daily practice. This case highlighted the importance of considering underlying rheumatological diseases for persistent scleral injection to include gout.

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Fig. 1 Diffuse left episcleritis with injection in the superficial episcleral vessels. Physical examination, BMI 26.5 kg/m²; blood pressure, 126/83 mmHg; visual acuity of 20/10 in both eyes. The left ankle joint and foot was erythematous with mild effusion without tophi formation. Ocular exam revealed an injected left eye, normal fundus exam with sharp optic disk margins, normal visual acuity, clear cornea, and no superficial punctate keratitis. There was no fluorescein uptake under slit lamp examination, and optical coherence tomography was unrevealing. Ocular pressure of the left eye: 21 mmHg

Author contribution Each author made substantial contributions to the design of the work, acquisition, analysis, and drafted the work or substantively revised it. The final manuscript was approved by each author prior to submission. Each author agreed both to be personally

accountable for the author's own contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.

Declarations

Informed consent Written informed consent was obtained from the patient to publish his image and clinical information related to the case.

Disclosures None.

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