

Ophthalmic Images

Subretinal Deposits Associated With Type 1 Cryoglobulinemia

Huan Chen, MD; Yang Zhang, MD; Rongping Dai, MD

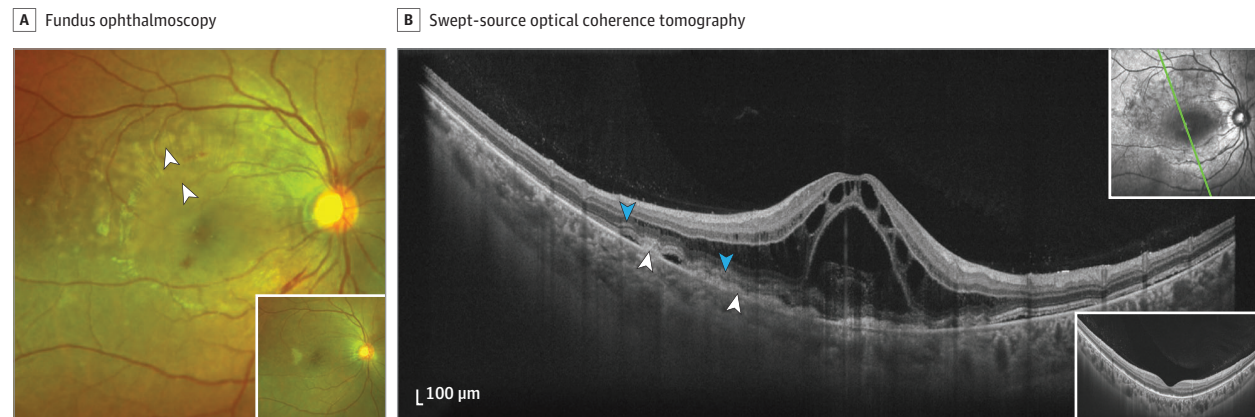


Figure. Subretinal deposits associated with type 1 cryoglobulinemia. Ophthalmoscopic examination revealed multiple subretinal yellowish lesions (A, white arrowheads), which presented as moderate-reflection deposits above the retinal pigment epithelium on swept-source (SS) optical coherence tomography (OCT) (B, white arrowheads). SS-OCT also revealed neurosensory detachment and cystoid macular edema with disruption of the external limiting membrane (B, blue arrowheads).

A 30-year-old female complained of blurred vision in the right eye. One month ago, she was admitted to the hospital for type 1 cryoglobulinemia with high IgG lambda, acute kidney injury, and hypertension. Her corrected visual acuity was 20/80 OD and 20/20 OS. Ophthalmoscopic examination in both eyes revealed multiple subretinal yellowish lesions (Figure, A, white arrowheads), which presented as moderate-reflection deposits above the retinal pigment epithelium (RPE) on swept-source (SS) optical coherence tomography (OCT) (Figure, B, white arrowheads). SS-OCT also revealed neuro-

sensory detachment and cystoid macular edema with disruption of the external limiting membrane (Figure, B, blue arrowheads). The deposits were associated with monoclonal immunoglobulins or their components leaked from blood vessels and appeared to accumulate above the RPE, potentially analogous to their deposition in the glomeruli and tubulointerstitium.^{1,2} The patient continued to receive chemotherapy. Three weeks later, her vision improved to 20/20 OU, and the deposits and macular edema resolved completely (Figure, A and B, inset).

ARTICLE INFORMATION

Author Affiliations: Peking Union Medical College Hospital, Department of Ophthalmology, Chinese Academy of Medical Sciences, Beijing, China (Chen, Zhang, Dai); Key Lab of Ocular Fundus Diseases, Chinese Academy of Medical Sciences, Beijing, China (Chen, Zhang, Dai).

Corresponding Author: Rongping Dai, MD, Peking Union Medical College Hospital, Department of Ophthalmology, Chinese Academy of Medical

Sciences, 1 Shuaifuyuan Rd, DongCheng District, Beijing 100730, China (derricka@sina.com).

Conflict of Interest Disclosures: None reported.

Additional Contributions: We thank the patient for granting permission to publish this information.

REFERENCES

1. Kanzaki G, Okabayashi Y, Nagahama K, et al. Monoclonal immunoglobulin deposition disease

and related diseases. *J Nippon Med Sch*. 2019;86(1):2-9. doi:10.1272/jnms.JNMS.2019_86-1

2. Bridoux F, Javaugue V, Nasr SH, Leung N. Proliferative glomerulonephritis with monoclonal immunoglobulin deposits: a nephrologist perspective. *Nephrol Dial Transplant*. 2021;36(2):208-215. doi:10.1093/ndt/gfz176