CLINICAL IMAGE

Unusual manifestation of diffuse large B-cell lymphoma

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A 74-year-old man was admitted to the hospital due to visual acuity impairment. Three months earlier, he underwent an uncomplicated cataract surgery. He presented with a significant visual acuity impairment (finger counting at 1 m), irritation of the right eyeball, inflammatory cells in the anterior chamber of the eye and numerous hyperechogenic densities in the vitreous chamber. The clinical features indicated late-onset bacterial endophthalmitis. The patient was qualified for vitrectomy with silicone oil tamponade. After the procedurem local stabilization was achieved. The vitreous culture was negative.

Two months later, his condition rapidly deteriorated. In the anterior chamber of the eye, fibrinous blood-stained exudate accumulated (FIGURE 1A), and a large pink mass appeared under the conjunctiva (FIGURE 1B). Ultrasound showed an infiltrate spreading from the ciliary body under the conjunctiva (FIGURE 1C). A surgical specimen was obtained. Microscopical examination showed a population of large lymphoid cells which had nuclei with few eosinophilic nucleoli and sparse cytoplasm (FIGURE 1D). Neoplastic cells were CD20 positive (FIGURE 1E) and had high Ki67 proliferation index (FIGURE 1F). Histopathological diagnosis of nongerminal center B cell–like (non-GCB) diffuse large B-cell lymphoma was established. Computed tomography did not reveal abnormalities in other parts of the body. After external beam radiation therapy (ocular irradiation with prophylactic central nervous system treatment, 30 Gy in 15 fractions), followed by chemotherapy (R-CHOP regimen), disease remission was achieved. At the last follow-up, 12 months after the end of treatment, the patient was in good general condition.

Diffuse large B-cell lymphoma is the most common subtype of adult non-Hodgkin lymphoma. About 60% cases present primarily with lymph node disease, as a rapidly enlarging mass, located in a part of the body with multiple lymph nodes (neck, arm pits, or groin). In the remaining 40% of cases, the disease begins as an extranodal lymphoma, most commonly in the stomach. Other locations include the testicles, breasts, uterus, ovaries, kidneys, adrenal gland, thyroid gland, bone, or brain.[1] Primary intraocular lymphoma is a rare malignancy and represents 1% to 2% of extranodal lymphomas.[2] The tendency to mimic chronic uveitis makes intraocular lymphoma

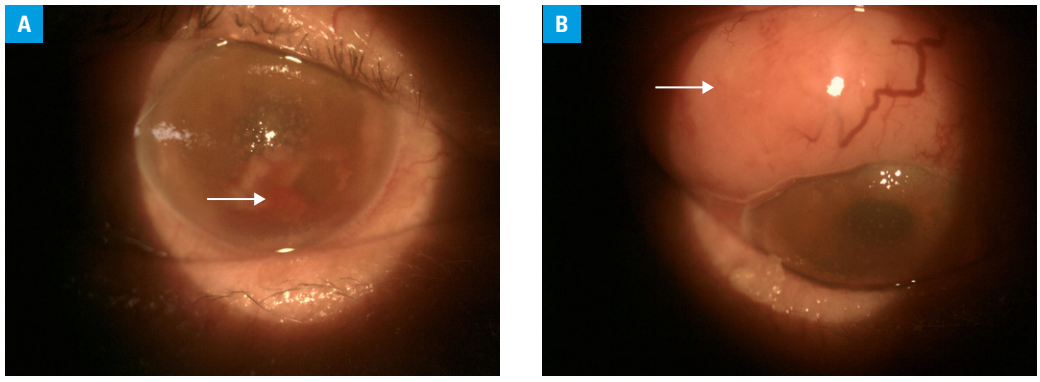

FIGURE 1 A – fibrinous blood-stained exudate accumulated in the anterior chamber of the eye (arrow); B – large pink mass under the conjunctiva (arrow)

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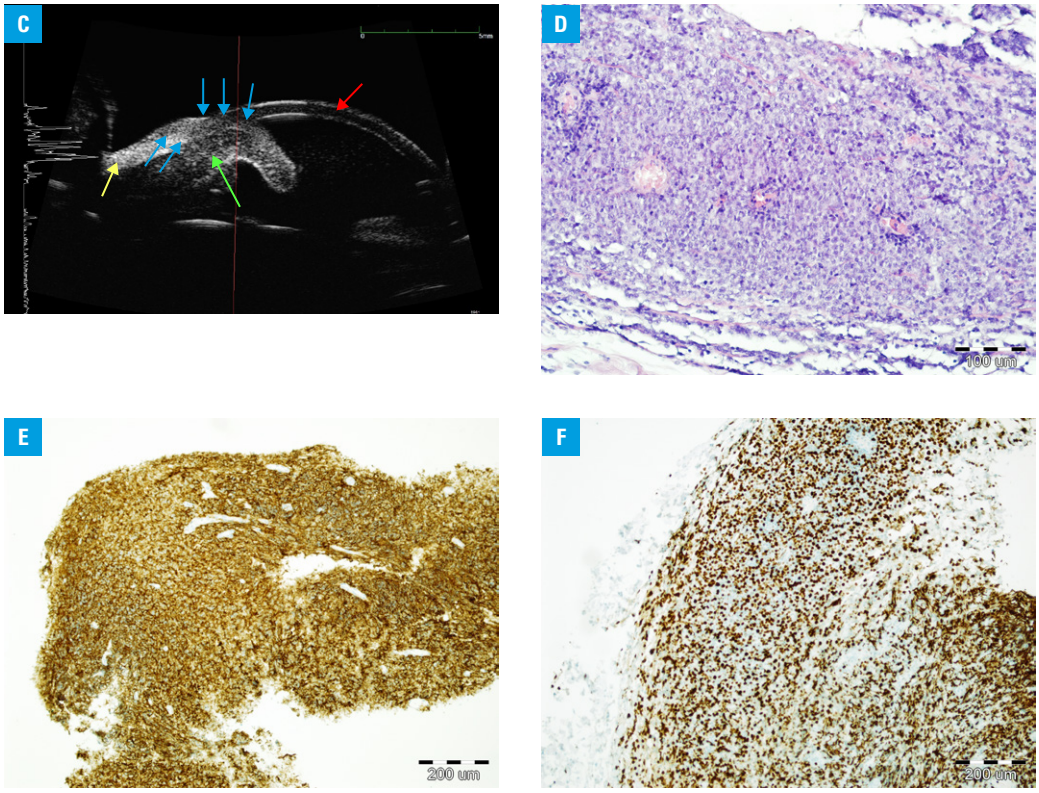

FIGURE 1
C – ultrasound scan of the anterior chamber and the base of the iris: red arrow indicates the cornea; yellow arrow, sclera; green arrow, infiltration of the ciliary body; and blue arrows, margins of the infiltrate; **D** – hematoxylin and eosin staining of diffuse large B-cell lymphoma; **E** – positive CD20 staining; **F** – high Ki67 proliferation index

difficult to diagnose. The infiltrate of the ciliary body, found in the present case, is extremely rare. Mortality rates in primary intraocular lymphoma range between 9% and 81% in follow-up periods ranging from 12 to 35 months. A median survival of patients treated with radiotherapy alone or chemotherapy plus radiotherapy ranges from 10 to 30 months.[2]

In the above case, both the history and symptoms indicated late-onset bacterial endophthalmitis—a rare, but extremely dangerous, complication of surgical procedures.[3] During the vitrectomy, no subretinal lesions typical of intraocular lymphoma were observed, and only changes usually seen in endophthalmitis: dense vitritis and anterior chamber inflammation. The suspicion of the lymphoma was raised after the patient's condition worsened and a pink lesion appeared under the conjunctiva. This example shows the importance of cooperation between the ophthalmologist, pathologist, and hematologist, especially in the case of an atypical course.

ARTICLE INFORMATION

CONFLICT OF INTEREST None declared.

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REFERENCES

1 Li S, Young KH, Medeiros LJ. Diffuse large B-cell lymphoma. Pathology. 2018; 50: 74-87.

2 Sagoo MS, Mehta H, Swampillai AJ, et al. Primary intraocular lymphoma. Surv Ophthalmol. 2014; 59: 503-516.

3 Mahabadi N, Ngando IA, Czyz CN. Bacterial endophthalmitis. Treasure Island (FL): StatPearls Publishing. 2020.