

Case Report

A Case of Temporal Arteritis Occurring with Cataract Onset and a Sudden Loss of Vision

Yilmaz Inanc,¹ Deniz Tuncel,¹ Mustafa Gokce,¹ Hamza Sahin,¹ Songul Bavli,¹ Yusuf Inanc²

¹Department of Neurology, Kahramanmaraş Sutcu Imam University Faculty of Medicine, Kahramanmaraş, Turkey

²Department of Neurology, Gaziantep University Faculty of Medicine, Gaziantep, Turkey

Abstract

Temporal arteritis or giant cell arteritis is a chronic vasculitis of the middle and large arteries. It is generally a disease occurring at an advanced age with an unknown etiology. Visual loss is the most important complication of the disease, and the symptoms may develop slowly within a few weeks or months. Sudden visual loss may also occur with a rapid progression in some cases. If there is any suspicion of temporal arteritis, steroid therapy should be initiated immediately. The purpose of this article is to emphasize the need to consider that there may be a systemic cause of cataract initiation and sudden onset of vision loss.

Keywords: Cataract, temporal arteritis, visual impairment.

Temporal arthritis (TA), also known as giant cell arteritis, is a chronic vasculitis involving medium and large arteries of unknown etiology, which affect people over 50 years of age. In particular, it tends to involve the external carotid artery and its temporal branch.^[1] The fact that there is a significant complication that develops in a short time such as loss of vision requires an urgent diagnosis. The purpose of this article is to emphasize the need to consider that there may be a systemic cause of cataract initiation and sudden onset of vision loss complaints.

Case Report

A 74-year-old female patient presented with the complaints of malaise, swelling around her mouth and eyes,

and a sudden loss of vision in the left eye, which started a week earlier. The neurological examination revealed that she was conscious, cooperative, and oriented, and her cranial examination revealed that the visual acuity was complete in the right eye and at the hand motion level in the left eye, the motor examination was normal, the sensory examination was normal, and there was no pathological reflex. There were hypertension and cataract onset in her medical history and diabetes in two siblings in her family history. The laboratory examination was normal except for the sedimentation and CRP elevation. Head magnetic resonance imaging (MRI) was normal except for the nonspecific ischemic areas. The EKO was normal in terms of cardiac pathology. The temporal artery ultrasonography (USG) was normal. Intraocular pathology was not considered in the

Address for correspondence: Yilmaz Inanc, MD, Department of Neurology, Kahramanmaraş Sutcu Imam University Faculty of Medicine, Kahramanmaraş, Turkey

Phone: +90 505 221 09 86 **E-mail:** drinanc@gmail.com

Submitted Date: October 10, 2017 **Accepted Date:** November 10, 2017 **Available Online Date:** November 16, 2017

©Copyright 2017 by Eurasian Journal of Medicine and Investigation - Available online at www.ejmi.org



consultation of eye diseases, but it was evaluated to be the cataract onset. In the left temporal artery, biopsy revealed an intima expansion, a granulomatous reaction on the vessel wall, and an occasionally histiocyte-rich inflammatory cell infiltration. These findings were evaluated to be compatible with the temporal artery. The neurology and rheumatology unit polyclinic control was recommended after the pulse steroid therapy (1 g/day, 5 days in total).

Discussion

TA is a vasculitis caused by ischemic complications affecting the medium and large vessels. Although the clinical findings such as a headache, limitation of jaw movements, polymyalgia rheumatica, and visual impairments are in focus, different symptoms may also occur depending on the affected vessel. Anamnesis and physical examination are the basic elements in the diagnosis of the TA. Although many of the clinical manifestations of TA are nonspecific, such as fever, fatigue and weight loss, some characteristic findings strongly suggest the diagnosis of TA. The first finding in two-thirds of the patients is a headache that has not been seen before. A temporal headache can be felt also in the frontal and occipital regions. It can simulate a tension-type headache and migraine. However, patients say that most of the time the existing pain does not resemble previous ones.^[2, 3, 4]

The erythrocyte sedimentation rate (ESR) and CRP level, leukocytosis, anemia, thrombocytosis can be found among the laboratory findings in TA cases. ESR and CRP are reasonable or high in the majority of patients when others are less frequent.^[5]

The visual acuity of 30% of the patients is affected and the visual loss is partial or complete blindness occurs in 15%. If one eye of the patient is affected, the other eye may also be affected within 24 hours. The early diagnosis and treatment are therefore important.^[6] In the present case, the visual acuity of the left eye had been affected. The patient was not anemia. TA is an advanced age disease and is rarely under the 50 years of age. The incidence of the disease increases with the advanced age. If there are other coexisting diseases, there can be some difficulties in the diagnosis and treatment of the disease. The present case was a patient with hypertension and the onset of cataract. The high ESR and CRP first suggested an infection. It was taken into account that the infection may exacerbate the current comorbid condition of the patient. However, an ischemic vasculitic event was considered to be preliminary among the factors such as acute onset and age. A biopsy is the gold standard in the diagnosis of temporal arteritis and

is 60-80% sensitive. When the result of a one-sided biopsy is negative, the other side can be biopsied too. Diagnostic value of colored Doppler ultrasonography was shown in the studies performed. However, it is not as valuable as the temporal artery biopsy.^[7] The colored Doppler ultrasonography was evaluated as normal in the present case. Patients suspected of temporal arteritis should be started to be treated as soon as possible. Steroids are the effective drugs in the treatment of TA. The first line treatment is 40-60mg daily and the treatment usually lasts 1 to 2 years.^[8]

As a result, since the disease is an advanced age disease, the diagnosis may be difficult in case of other coexisting diseases. For this reason, TA should be kept in mind and investigated, particularly in case of a different visual impairment which is not previously defined or differs from the previous ones in a patient of advanced age.

Disclosures

Informed Consent: Written informed consent was obtained from the patient who participated in this study.

Peer-review: Externally peer-reviewed.

Conflict of Interest: None declared.

Authorship contributions: Concept – Y.I., D.T., M.G.; Design – H.S., S.B., Y.I.; Supervision – D.T., M.G., H.S.; Materials – Y.I., S.B., Y.I.; Data collection &/or processing – Y.I., D.T., M.G.; Analysis and/or interpretation – M.G., H.S., S.B.; Literature search – Y.I., D.T., Y.I.; Writing – Y.I., D.T.; Critical review – M.G., H.S., S.B., Y.I.

References

1. Barraclough K, Mallen CD, Helliwell T, Hider SL, Dasgupta B. Diagnosis and management of giant cell arteritis. *Br J Gen Pract* 2012;62:329–30.
2. Petri H, Nevitt A, Sarsour K, Napalkov P, Collinson N. Incidence of giant cell arteritis and characteristics of patients: data-driven analysis of comorbidities. *Arthritis Care Res (Hoboken)* 2015;67:390–5.
3. De Smit E, Palmer AJ, Hewitt AW. Projected worldwide disease burden from giant cell arteritis by 2050. *J Rheumatol* 2015;42:119–25.
4. Smith JH, Swanson JW. Giant cell arteritis. *Headache* 2014;54:1273–89.
5. Buttgerit F, DeJaco C, Matteson EL, Dasgupta B. Polymyalgia Rheumatica and Giant Cell Arteritis: A Systematic Review. *JAMA* 2016;315:2442–58.
6. Kermani TA, Schmidt J, Crowson CS, Ytterberg SR, Hunder GG, Matteson EL, et al. Utility of erythrocyte sedimentation rate and C-reactive protein for the diagnosis of giant cell arteritis. *Semin Arthritis Rheum* 2012;41:866–71.
7. Aranda-Valera IC, García Carazo S, Monjo Henry I, De Miguel Mendieta E. Diagnostic validity of Doppler ultrasound in giant cell arteritis. *Clin Exp Rheumatol* 2017;35 Suppl 103:123–7.
8. Jivraj I, Tamhankar M. The Treatment of Giant Cell Arteritis. *Curr Treat Options Neurol* 2017;19:2.