

## Temporal Arteritis: A Nearly Catastrophic Miss

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### Abstract

Temporal arteritis, also known as giant cell arteritis, is a disease that can affect both males and females over 50 years of age. Temporal arteritis may be uncommon, but it is not benign and may cause its victims to become irreversibly blind if the disease is not identified and treated promptly. Various symptoms may present in a slow and insidious manner, which can make the diagnosis initially less obvious. We present a patient who went to multiple physicians and was diagnosed with stress and occipital neuralgia before finally being correctly diagnosed with temporal arteritis.

**Keywords:** Temporal Arteritis; Giant Cell Arteritis; Blindness; Loss of Vision; Jaw Claudication; Jaw Pain; Headache; Weight Loss; Weakness; Erythrocyte Sedimentation Rate (ESR)

### Introduction

Temporal arteritis, also known as giant cell arteritis (GCA), is a condition affecting both males and females over 50 years of age. It often has an insidious onset with vague symptoms of headache with or without scalp tenderness, low grade fever, and unprovoked weight loss. These symptoms combined with jaw claudication, shoulder or leg pain, or fatigability can be indicators that temporal arteritis should be included in the differential diagnosis [1]. Sudden loss of vision is not unusual. Unfortunately, this important disease can be missed by even experienced clinicians, as it is somewhat uncommon and can be masked by additional etiologies [2-11]. This case is presented in hopes that it will prevent misdiagnosis of future patients.

### Case Report

An 81-year-old male presented to an urgent care facility complaining of symptoms including intermittent frontal headaches, difficulty with chewing, and a feeling of weakness in his jaw. He had initially noticed his intermittent headaches a couple of

months prior, and now realized that he no longer had stamina for playing golf or eating foods requiring more effort, such as burgers, due to weakness and pain. He was unable to get an appointment with his regular physician, so he went to the urgent care facility, where he was told his symptoms were likely due to stress and to take acetaminophen as needed. At that time, the patient did not have any visual symptoms. His vital signs were as follows: blood pressure of 120/75 millimeters of mercury (mmHg), pulse 68 beats per minute (BPM), temperature within normal limits, and oxygen saturation of 94% on room air.

The patient then went to see his otolaryngologist, as the patient had a history of frequent sinus infections in addition to his new complaints. The physician performed a laryngoscopy and sent the patient home without a confirmed diagnosis. The patient then went to his dentist and had an unremarkable dental evaluation. At one point, occipital neuralgia was considered.

During the patient's wife's visit to their otolaryngologist some time later, the physician noticed that he did not look well and asked

him about his symptoms. After listening to his constellation of symptoms, temporal arteritis was then suspected. His erythrocyte sedimentation rate (ESR) at that time was 85 mm/hour (Westergren method normal value in a >50-year-old male: <20 mm/hour; normal in a >50-year-old female: <30 mm/hour [12]). A temporal artery biopsy confirmed the diagnosis. The patient was placed on 80 mg of prednisone, which was tapered by 20 mg every 2 weeks. The jaw pain returned when he reached a dosage of 40 mg, so his dose was increased to 60 mg. His ESR at that time was 42 mm/hr. Methotrexate was then added by the patient's rheumatologist.

After more than a month of treatment, the patient still reports generalized weakness, but no longer complains of a headache. The patient denied any ocular symptoms throughout the disease and treatment course. At this time he presented to our office his visual acuities are 20/20 each eye with correction. With correction it was J1 for near. Anterior segment examination within normal limits. He is pseudophakic in each eye and fundus was within normal limits without any optic disk pallor. His fields were charted by Humphrey field analyzer and they were within normal limits.

## Discussion

Temporal arteritis is a vision-threatening condition that affects the larger arteries in the body; most notably the temporal artery. However, any of the arteries supplying the head can be involved [1-12]. Although this disease is rare, if it is not considered as part of a differential diagnosis when a patient comes in with headache, scalp tenderness, weight loss, and jaw claudication, it could result in irreversible blindness for the patient [2-12]. Obtaining an erythrocyte sedimentation rate and/or a C-reactive protein level is considered the best screening tool for GCA; however, there have been case reports published that indicate these are not always adequate for diagnosis [13,14]. Temporal artery biopsy is the most specific test for this condition [14]. It is important to obtain a specimen of adequate size during the biopsy in order to increase the probability of capturing a lesion [8,11]. Treatment includes administration of high-dose glucocorticoids, which should never be delayed while awaiting biopsy results [8], often starting at a dose of 1 mg/kg [10]. Methotrexate and other drugs have also been used in conjunction with glucocorticoids [3,15,16].

## Conclusion

Although temporal arteritis is uncommon, especially in certain ethnicities [17,18], it is still crucial to remain vigilant when older

patients present with headaches, pain/weakness with chewing, or pain when combing their hair. It is important to obtain a thorough history and know what information must be asked and collected from a physical examination and workup. Asking the right questions could save someone's vision, and perhaps even their life.

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