



Ottawa
Headache
Centre

TEMPORAL ARTERITIS

Introduction

Temporal arteritis (also called Giant Cell Arteritis) occurs in 3-9 per 100,000 patients over the age of 50. It is more common in women than in men. Although this is a systemic disorder, headache is a common presenting complaint and temporal arteritis should be considered in the differential diagnosis of headaches in the elderly. Because of the risk of blindness if untreated, this condition is considered a neurological emergency and physicians need to be able to recognize the disorder and intervene early.

Clinical features

Although headache is not the only symptom in Temporal Arteritis, it is the most common presenting symptom, and must be considered when an older patient presents with headaches of recent onset or when there is a change in the usual headache pattern. The headache typically occurs in the temporal location, but may involve any region of the head. It may be continuous or intermittent, and may be described as having a throbbing, boring or steady, aching quality. Scalp tenderness is a common complaint, and this may be exacerbated by local pressure, such as wearing a hat or lying on a pillow.

Systemic involvement may occur. Symptoms include myalgias, arthralgias, jaw claudication, as well as mood changes, weight loss, fever, night sweats and fatigue. When these symptoms occur without cranial arteritis, the condition is termed polymyalgia rheumatica. This is said to occur in 25% of patients. A particularly ominous symptom is that of visual loss, which is commonly unilateral, but may involve both eyes. If untreated, between 7 and 60% of patients will be permanently blinded. The visual loss is usually caused by ischemic optic neuropathy. However, some cases of visual loss have been described in association with other lesions, including bilateral occipital lobe infarctions.

On examination, induration and tenderness is noted over the superficial arteries, especially in the temporal or occipital areas. The pulse may be absent or diminished. Abnormalities may be noted on testing visual acuity or visual fields. Optic disc edema may be noted on fundoscopic examination.

Investigations

The consistent laboratory finding is that of an elevated erythrocyte sedimentation rate (ESR). This is usually raised to between 60 and 120 mm/hour. Other laboratory findings may include a mild anemia, elevated C-reactive protein, and abnormalities on liver function tests. The best confirmatory test is a temporal artery biopsy. However, treatment should never be delayed, if the

clinical index of suspicion is high. If an arterial biopsy is to be done, it should be performed within 48 hours of initiating steroid therapy. The biopsy may be performed under local anesthesia. A false negative biopsy result may sometimes be obtained, due to patchy involvement of the temporal artery. Angiography may help confirm the diagnosis in equivocal cases.

Treatment

High dose steroids should be initiated immediately, when the clinical diagnosis has been made. Prednisone 60-80 mg usually normalizes the ESR within four weeks, and improves symptoms. The dose of Prednisone can then be gradually reduced to 5-10 mg daily. However, if symptoms recur or the ESR rises, the steroids may need to be increased temporarily. Since the condition tends to burn out, steroids can usually be discontinued over 6 months to 2 years.

References:

1. Newman L. C. and Lipton R B. Emergency Department Evaluation of Headache in: *Neurologic Clinics Vol. 16 No. 2* Neurologic Emergencies. May 1998, 285-303.
2. Keltner, J.L. Giant-cell arteritis: signs and symptoms. *Ophthalmology*, 1982;89:1101-1110