Giant cell arteritis as a cause of jaw claudication

Sir,

Giant cell arteritis (GCA), a systemic panarteritis involving medium and large arteries\(^1\) has rarely been reported from India.\(^2\) We report an elderly female who presented with fever and jaw claudication.

A 65-year-old housewife was admitted with a history of low-grade pyrexia for 10 weeks. A few days later she started having moderately severe throbbing headache, which was marked on the right side and was especially in the temporal and occipital regions. In addition, she had jaw claudication, which gradually increased in intensity. All peripheral pulsations were normal except for the right temporal artery which was not palpable and the left temporal artery was feeble. The facial artery on right side was cord-like and no pulsations could be felt. Systemic examination was normal. Temporal artery biopsy (right side) revealed intimal proliferation with medial hypertrophy. Elastic lamini revealed disruption. There was moderate chronic inflammatory infiltrate with a few giant cells (Figure I and 2). The patient was treated with steroids (prednisolone -0.3 mg/kg/body wt.) to which she responded rapidly with disappearance of both headache and fever. Steroids were continued on the same dose for a month after which the dose was tapered.

Giant cell arteritis also known as temporal arteritis is a chronic vasculitis of medium and large-sized arteries.\(^1\) It usually involves the cranial branches of the arteries arising from the aortic arch. It generally manifests as fever of low grade and headache, especially over the temporal and occipital areas.\(^3\) On physical examination the frontal and parietal branches of the superficial temporal artery are tender, thickened, nodular or may be absent. Jaw claudication occurs in half of the cases. The other manifestations are partial or permanent loss of vision, mononeuritis multiplex, peripheral neuropathy and strokes involving the territory of the affected artery.\(^4\)

Laboratory investigations usually reveal elevated ESR and C-reactive protein, anemia, generally normocytic normochromic, thromocytosis and decreased serum albumin. Liver enzymes may be elevated. Temporal artery biopsy is diagnostic.\(^5\) The response to corticosteroids is usually rapid. However, 30-50% patients have spontaneous exacerbations and may re-

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require cytotoxic agents like methotrexate.1

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Non-equivalence of bioavailability between generic and branded form of Sodium valproate

Sir

In the open market, an anticonvulsant drug is available by different brand names promoted by the respective pharmaceutical companies. However, the hospital pharmacies, including in the developed European countries stock and supply the generic forms (Chemical compound) purchased through the tender system.2 Differences in the bioavailability of drugs from the same anticonvulsant and rarely different batches of the same anticonvulsant belonging to the same company have also been reported.2-4

Two mentally retarded adults suffering from a combination of myoclonic and generalized tonic clonic seizures since childhood were treated with a generic form of sodium valproate. Initially the generalized tonic clonic seizure was occurring in a frequency of 2 - 6 / week in the first and about 1 / week in the second patient. The myoclonic seizure was occurring daily in a varying frequency in both. The patients were staying in a Home and were looked after by 'caretakers'. To start with, the generic form of sodium valproate was administered in a dose of 200 mg bid and gradually stepped up to 1600 mg / day and 1400 mg / day in three divided doses over a period of 1½ years. The drug was administered orally by the 'caretakers' and the seizure count was recorded in a diary. For two consecutive months, they were maintained on the same dose. The myoclonic seizure was fully controlled and the generalized tonic clonic seizure occurring in a frequency of 4 / month and 2 / month respectively. The serum level of the free valproic acid was estimated by Fluorescent Polarisation Immuno Assay (FPIA) technique. Blood samples were drawn by 8 am, prior to that day's drug intake. The biochemist was blinded to the patient and the form of the drug. The serum level was 67.87 µg/ml and 71.16 µg/ml respectively. A branded form of sodium valproate was substituted for the generic form in the same dose and interval for a period of one month. At the end of one month, the seizure frequency was 2 and 1 per month and the repeat serum level of free valproic acid (blood sample taken at 8 a.m.) was 118.40 µg/ml and 80.58 µg/ml respectively. No adverse effects were noticed.

The bioavailability of a drug is the quantum of the drug available in the systemic circulation for its action after absorption.4 In the management of epilepsy which requires a long-term treatment for years, the bioavailability of the anticonvulsant drug should not fluctuate from time to time. If the level goes up, it may lead to intoxication and if it lowers down, seizure may relapse. Recently, non-equivalence in the bioavailability of carbamazepine of two different brands has been observed.5 An epidemic of phenytoin intoxication among epileptic patients taking the same brand of phenytoin but different batches has been reported from an Australian city.5 Change in the excipient in the phenytoin capsule was responsible for the higher serum level of the drug. Thus, the same anticonvulsant belonging to the same brand can produce changes in the bioavailability. Even in developed countries hospital pharmacies issue the generic form of the drugs because they are cheaper; the generic name avoids delay in recognizing toxic effects and the doctor can know immediately what his colleague has prescribed. But different pharmaceutical companies may supply the same generic drug whose bioavailability is likely to vary.4

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