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Medicine

AN UNUSUAL CASE OF GIANT CELL ARTERITIS WITH STROKE AND INFRA-NUCLEAR FACIAL PALSY

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KEYWORDS :

INTRODUCTION

Giant-cell arteritis (GCA) or temporal arteritis is an inflammation of medium and large sized arteries.It involves one or more branches of the carotid arteries, particularly the temporal artery. GCA generally manifests itself beyond the age of 50. With growing age, incidence steadily rises. Peak ages range between 70 and 80. The classical presentation features include: headache, visual disturbances, and jaw claudication. There are some instances where GCA initially presents atypically. GCA is a rare cause of stroke

HISTORY

A 61-year old right-handed man presented to hospital with headache, dysarthria, unsteadiness of gait and vomiting. Patient was a case of diabetes mellitus and hypertension for 3 years on OHAs but not on antihypertensive treatment. Headache since 3 months, holocranial, throbbing, aggravated on movement, more during and after meals, reduced with medications. Worsened in intensity since one day, unresponsive to treatment. Slurring of speech since 1 day. Difficulty in articulation of words, but no difficulty in comprehension. Unsteadiness of gait since 1 day, with tendency to fall while walking on either side, more towards the left. Vomiting since 1 day, 3-4 episodes per day, usually after meals, non projectile, non bilious, not blood tinged. 5th day of admission patient complained of sudden onset of diminution of vision. On the 8th day of admission it was noticed patient had developed left sided infra-nuclear facial palsy.

EXAMINATION

- Pulse- 82/min
- BP- 150/90 mmHg
- RR- 18/min
- RS- bilateral NBVS
- CVS- S1, S2 were heard and normal, no murmur
- PA- soft, non tender
- CNS- Concious, restless, irritable, No SNFP, nystagmus+, tone normal, power grade 5/5 in all limbs, DTR normal, plantars flexor. Tandem walking- swaying to either side, more to the left, no other cerebellar sings. No neck stiffness
- Later(8th day) – finger counting close to face impaired, however light reflex invoked a normal pupillary respose. Left sided infra-nuclear facial palsy was present : absent eye closure, drooling of saliva

DIFFERENTIAL DIAGNOSIS

1. Cerebrovascular Accident
   - Cerebellar infarct
   - Later- occipital infact
2. Basillar Migraine
3. Temporal Arteritis
4. Viral encephalitis

INVESTIGATIONS

- Hb: 12.5, TC: 11200 (N85/L5), Platelets: 3.09L
- Urine routine analysis: normal
- BU-11, S.Cr-0.75, electrolytes normal
- Ca-9.2, Mg-1.61, PO4-2.6, uric acid-5.5
- Serum ammonia: 62, ESR-56mm/hr
- LFTs, TFTs, Lipids – Normal
- CT Brain- Initially normal
- CSF analysis- cytology/gram stain- normal, gluc-101(113), prot-35, Cl-106, CBNAAT for MTB-negative, ADA-1.47, culture-sterile
- MRI could not be done as patient was restless
- CT angiongiography of brain and neck vessels- infarcts in left occipital region, bilateral cerebellar hemispheres and bilateral middle cerebellar peduncles. Thrombosis of left vertebral artery.
- Carotid Artery Doppler- atheromatous plaque in left internal carotid artery, not causing significant stenosis.
- 2D ECHO: Mild LVH, rest normal
- Temporal artery biopsy: Giant cell arteritis
- Biopsy of temporal artery: Section show temporal artery with marked subintimal hyperplasia causing the luminal narrowing. There is moderately dense lymphohistiocytes and few plasma cells invading the media and adventitia with foci of calcification. There is no fibrinoid necrosis. Internal elastic lamina is fragmented eliciting the foreign body response

MANAGEMENT

Patients BP and sugars were controlled. Initially patient was treated as viral encephalitis with acyclovir. On clinical suspicion of temporal arteritis, patient was initially treated with a 3day course of 1g methylprednisolone IV, followed by oral prednisolone at 1mg/kg/day. Headache reduced by the 2nd week of starting steroids, patient was calm, ESR-2mm/hr. Patient was discharged once symptoms started improving and was planned for a month of steroid at the same dose followed by gradual tapering to a minimum acceptable dose to prevent worsening of headache.

SUMMARY

- Elderly male with headache for several months presenting with symtoms of a cerebellar cva.
- History of worsening of headache during and after meals and an increased ESR, raised a suspicion of temporal arteritis.
- Patient also developed an infra-nuclear facial palsy during the course in hospital
- Patient's symptoms improved with corticosteroids.
- Temporal artery biopsy done and sent to NIMHANS for analysis later revealed Giant Cell Arteritis, hence confirming the diagnosis.
- According to literature, those who have been diagnosed with giant cell arteritis are more likely to experience a stroke in the future.
- An unusual presentation of GCA could put patients at greater risk for consequences, including irreversible visual loss, by delaying diagnosis and treatment.
- Hence atypical symptoms for GCA in patients older than 50-years should be considered.
- Prompt diagnosis and the timely initiation of targeted treatment improves the chances of optimal outcomes.

DISCUSSION

Giant cell arteritis is a granulomatous vasculitis affecting large vessels of aortic arch and intracranial branches. Most common presentation is headache and jaw claudication. Stroke as a presentation is rare in GCA and hence there is no standard guidelines. 1 A similar case report was

also described by T Kuganesan et al, where an 84 year old male presented with posterior circulation stroke. 2 The patient in the study was initiated on steroids followed by methotrexate with gradual tapering of steroids. Due to the rare presentation of this condition a high degree of suspician is necessary for diagnosis.

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