Correspondence

Fluorosis: An Overlooked Cause of Dysphagia

Sir,

Dysphagia is a common presentation in older people. Fluorosis affecting the cervical spine is an uncommon cause of dysphagia and may be overlooked. The diagnosis of fluorosis involving the cervical spine often goes unrecognized as a cause of dysphagia. Diagnosis is established with history, endemic nature of disease, plain cervical radiographs and barium swallow especially when endoscopy has excluded an intrinsic causes for dysphagia, biochemical and other radiological features suggestive of fluorosis. We report the case of a 68-year-old woman, resident of Agra, Uttar Pradesh, India with no known co-morbidities, who presented with complaints of 1 year history of dysphagia for solid foods and significant weight loss. There was no history of dyspnoea, hoarseness of the voice, odynophagia. She also complained of pain in the neck, backache and progressive weakness of upper and lower limbs for 3 years. The weakness had increased in severity to the point that she was unable to sit or stand without support. She also complained of numbness in lower limbs but there was no associated bladder or bowel dysfunction. Family history revealed husband and 2 sons suffering from similar musculoskeletal and neurological complaints. Neurological examination revealed compressive myelopathy causing quadriaparesis. Lateral radiograph of the cervical spine showed anterior osteophyte formation most marked at the C3/C4 vertebrae and calcification of the anterior longitudinal ligaments as well as posterior longitudinal ligaments. MRI (L.S. spine) showed generalized diffuse skeletal fluorosis with ossified posterior longitudinal ligament (OPLL) with marked ligamentum flavum hypertrophy, osteophytes and facetopathy resulting in lumbar canal stenosis at various levels (D11/12, D12/L1, L1/L2), with crowding and compression of cauda equine at the level of canal stenosis (L4/L5), with sclerosis, suggestive of fluorosis. X-ray of both forearms and legs showed calcification of interosseous membrane and irregular periosteal bone formation. On the basis of clinical examination, MRI, and X-ray findings, the patient was diagnosed as a case of endemic skeletal fluorosis who presented as compressive myelopathy causing quadriaparesis with dysphagia. According to UNICEF fluorosis is endemic in at least 25 countries across the globe, being most severe and widespread in India and China. The neurological complications occur in 3 - 10% of cases of skeletal fluorosis. These complications are mainly due to compression of the spinal cord and the roots by the protruding osteophytes. These features usually develop after exposure to high fluoride (> 4 ppm) for longer than 10 years. Spinal cord involvement is commonest in the cervical region and in one study has been reported to constitute 56% of 136 patients of fluorosis and neurological complications. Radiological changes are diagnostic of the condition. Interosseous membrane calcification of the forearm has been taken as a definite radiological index of skeletal fluorosis. The cases may be mistaken for ankylosing spondylitis, DISH with OPLL and osteoarthritis. Most important differential diagnosis is DISH with OPLL, but to distinguish it is a disease of old age and never endemic and in DISH radiological changes in form of facetopathy and interosseous membrane calcification are absent.

References


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Life Threatening Haemorrhagic Complications of Malaria

Sir,

The article entitled “falciparum malaria presenting as subdural hematoma”, is an excellent documentation. Malaria causes various hematological and hemorrhagic complications with thrombocytopenia among which the ocular and intracranial hemorrhagic complications are rare but more so fatal compared to general bleeding complications. The complications earlier described/observed with falciparum malaria are now also being observed with vivax malaria. If intracranial or subdural hematomas are not recognised and treated promptly with correction of associated hematological complications and evacuation of hematoma, it may be potentially fatal. Vitreous hemorrhage may be an important cause of visual impairment in malaria patient besides cortical blindness and optic neuritis.

In India, in the malaria post-resurgent era, the complications are not likely to occur early as it used to occur in early 1990’s outbreaks but quite late after about a week or two time interval if the patient is not treated promptly in the initial stage. These complications are documented/observed in case of jaundice/hepatitis and renal failure. Thrombocytopenia is also a feature of severe malaria and most of the times decreased platelets counts are also associated with abnormal function. A correlation with severity of malaria with thrombocytopenia has also been described.2,3 Deranged coagulation profile with bleeding tendency is also common with hepatic and renal dysfunction.

So there is a need of the hour to treat each and every patient of malaria at the onset of fever/first symptoms so as to avoid such complications.

References


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Received: 28.06.2011; Accepted: 02.08.2011