

deformity, general well-being and quality of life (ALP improved after 1 year). These 2 patients were able to perform all the activities of daily living appropriate to their age whilst the parents were satisfied with their overall progress. To the best of our knowledge, this is the first report from India describing role of pamidronate in FD due to MAS.

FD is characterized by replacement of normal bone tissue by fibrous connective tissue with a characteristic whorled pattern containing trabeculae of immature non-lamellar bone. Histopathologically, FD shows fibrous stroma with spicules of disconnected woven bone with a few mature osteoblasts and osteoclasts. Bisphosphonates inhibit osteoclasts, reduce bone resorption and can lead to refilling of dysplastic lesions.

As observed by most other investigators, our observations highlight that good results can be obtained with pamidronate in FD, which should be administered early to halt disease progression, preserve bone mass, reduce fracture rates, avoid deformities, alleviate symptoms and delay/avoid surgery(1,2). Since standard guidelines for its use are unavailable, therapeutic response to pamidronate is noteworthy while longterm follow-up is awaited(3). Pamidronate therapy appears to be useful in children and adolescents with FD with a good short term safety profile. Potential multisystem (renal, hepatic,

cardiovascular, gastrointestinal and skeletal) and oncological adverse effects of long term use are open to observation and speculation(4,5).

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## Episodic Cluster Headache: A Rare Diagnosis in Children

Cluster headache is a rare disorder in childhood. We report an 8 years old girl who was referred by her family doctor at seven years of age with complaint of episodic headache for 7-8 weeks. Symptoms resolved and the child was symptom free for about nine months. She presented again with similar type of headache for 2 weeks. The headache was on forehead and vortex mainly on left side, was throbbing in nature and she described it "as if

somebody is pushing on her head". The headache was worse in the evening and sometimes used to wake her from sleep. The headache occurred three to four times a day lasting for one to two hours each time. She did need regular analgesia (paracetamol and ibuprofen) to relieve the headache. During the episode of headache, she used to be in tears, restless and agitated because of severe pain and agony. She also had occasional eye pain on the left side along with rhinorrhea. There was no associated nausea but she vomited on a couple of occasions. She had good appetite without any weight loss. There was history of migraine in mother and maternal uncle, and cluster headache in paternal uncle. The positive findings on the general physical examination were

subconjunctival hemorrhage and partial horner's syndrome (ptosis and miosis) on left side. Blood pressure, fundus examination, cranial nerve functions and neurological examination were normal. MRI brain was normal. A trial of 100% oxygen by face mask was given during the attack of headache to which she responded dramatically. The diagnosis of episodic cluster headache was made. She responded to oxygen every time during the attack of headache. She was then discharged on maintenance dose of indomethacin, and is completely well now.

The symptoms of this girl fulfil the criteria for the diagnosis of episodic cluster headache according to the International Society of Headache. It is in contrast to chronic cluster headache in which there are no remission periods or remission period is less than one month(1). In our patient, the remission period was nine months.

The girl in our case showed good response to indomethacin after termination of attack with oxygen. A previous case report of a seven year old girl showed good response to steroids but negative response to indomethacin. The etiology of cluster headache remains unknown(2). The possible genetic nature (autosomal dominant) of cluster headache has been proposed(3). Cluster headache is very uncommon in children less than 10 years of age. The diagnosis is usually made in late adolescence or adulthood. Some patients experience cluster headache for as long as twenty years and require multiple medical contacts before the correct diagnosis is established. The other cluster headache like disorders including paroxysmal hemicrania and short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT) can occur in children but are very rare and usually misdiagnosed(4). Although headaches in children are generally benign, neuroimaging studies are frequently performed in clinical practice for the fear of missing a serious underlying disease. The yield of neuroimaging in recurrent headache of

children with a normal neurologic examination is low and it should not be a part of routine initial evaluation(5). The differential diagnosis of cluster headache is wide, and in childhood it may be mistaken for pseudo seizures or some type of behavioural disorder.

This report highlights a rare diagnosis of a disorder that is known to have childhood onset but often is misdiagnosed or the diagnosis delayed. The dramatic response to oxygen during the attack in a child with other suggestive features can be useful in making a quick diagnosis and starting the appropriate treatment early.

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