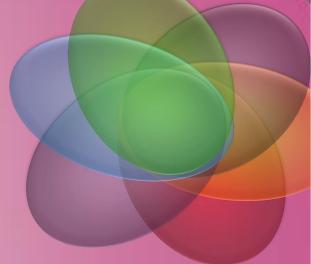




Myelofibrosis in Severe Vitamin D Deficiency Rickets: A Case Report



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Background

- Vitamin D deficiency is prevalent in infants and children in underdeveloped countries. Secondary myelofibrosis has been reported as a complication of severe rickets and in these children anemia, myeloid metaplasia and bone aplasia strongly suggested myelofibrosis



Case

- We report a case of myelofibrosis in two years old boy with severe vitamin D deficiency rickets and hepatosplenomegaly. He presented with grossly delayed gross milestones but his intellectual development was normal. The nutritional intake was very poor, comprising of breastfeeding and small quantities of home-cooked cereals. The child severely malnourished, with weight in -2.4 z score and length was -4.9 z score. he was anemic and had a wide open anterior fontanel and signs of florid clinical rickets. There were no neurological abnormalities except for mild generalized hypotonia. Radiological survey of the bony skeleton showed severe generalized osteopenia. extensive rickets of the thoracic cage and ends of long bones with splaying, cupping and fraying of metaphyses. No pathological features were noted.

- There was focal kyphosis in dorsolumbar region. Bone trephine clearly depicted replacement of hemopoiesis by fibroblasts with very occasional erythroid and myeloid precursors and no megakaryocytes were seen. Reticulin stain revealed significantly increased fibrosis, findings were consistent with myelofibrosis.



Conclusions

- Rickets should be considered as one of the conditions that can lead to severe hematological disorders in infants



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No conflict of interest

