

Case Report On Rickets With Ocular Involvement

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Abstract:

We report here, a case of Rickets with ocular involvement in a 10 year old girl. She was having corneal opacity in right eye and cataract in left eye with other bony manifestation of rickets.

Key-words: Young age, corneal opacity, developmental cataract, bone findings in Rickets.

Case history:

A 10 year old girl presented with diminution of vision in both eyes with FC 4metre in right eye and PL in left eye. Patient gave history of reduced vision since 2 years. There was central leucomatous opacity in right eye and total developmental cataract in left eye (fig. 1)

On systemic examination it was found that patient was having frontal bossing, rachitic rosary marked widening of wrist and ankles and anterolateral bowing of legs. There was Harrison's sulcus and pot belly (fig. 2 and 3). The eruption of teeth was normal. There was no evidence of latent tetany. The scalp and body hair were normal. The weight was below the 25th percentile for age. Patient was suffering from protein energy malnutrition (PEM). Examination of cardiovascular, respiratory and central nervous system did not reveal any abnormality. Biochemistry investigation showed blood level of calcium 7.8 mg/dl (normal 8.5-10.5 mg/dl), phosphorus 3.3 mg/dl (normal 2.7-4.5mg/dl) and alkaline phosphatase 1000 IU/L (normal 187-518 IU/L) respectively. Examination of urine revealed a pH of 7.5 specific gravity of 1018 and

Mild generalised aminoaciduria; there was no glucosuria and albuminuria. The 24 hr urinary excretion of calcium and phosphorus was 75 mg (4.7 mg/kg/day) and 306 mg (20.4 mg/kg/day) respectively. Patient was diagnosed of rickets and referred to medicine department of Global hospital for further evaluation and treatment. For ocular problem Patient was advised to undergo cataract extraction surgery with IOL implantation in left eye but patient parents refused to undergo operation

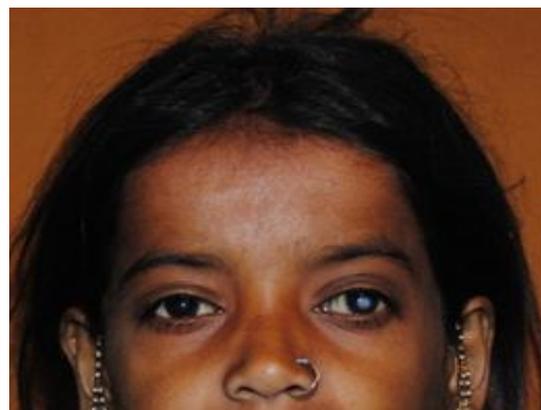


Fig. 1 (R/E- lucomatous corneal opacity and L/E total developmental cataract)



Fig.2 Frontal bossing, rachitic rosary
Harrison's sulcus and pot belly

Discussion:

A study done by Reddy P S, Lakshamma K, Rao K S to detect the various ophthalmic abnormalities in Paediatric Rickets. Out of 85 cases, 60% rickets children (51 cases) showed associated deficiency signs like corneal opacities 6% and congenital cataract 2%. Out of 40% refractory rickets (34



Fig. 3 Anterolateral bowing of legs

cases), 3% corneal dystrophy and 6% congenital cataract were found.

References:

-Reddy P S, Lakshamma K, Rao K S. Study of ophthalmic lesions in rickets. *Indian J Ophthalmol [serial online]* 1979 [cited 2013 Aug 4];27:229