Hair-on-end appearance

More than 80 years ago, Cooley and Lee described skeletal changes associated with haemolytic anaemias. Hair-on-end appearance of the skull is a characteristic feature of chronic haemolysis usually seen in patients with thalassaemia and sickle cell anaemia. It results from accentuated vertical trabeculae between the inner and outer tables of the skull because of excessive bone marrow hyperplasia. An incidence of 8.3% of hair-on-end appearance in thalassaemic patients has been reported. Though, rare, these appearances have been described in iron deficiency anaemia and cyanotic congenital heart disease.

This young child had been diagnosed at age 9 months with thalassaemia major (parents and siblings were normal). At presentation, in respiratory distress, he was undergoing monthly blood transfusions. Skull x ray showed characteristic hair-on-end appearance (figs 1 and 2). With the availability of effective treatments for thalassaemia in developed countries, this complication is rarely seen.

Reference

Competing interests: none

Figure 1 Hair-on-end appearance: lateral view.

Figure 2 Hair-on-end appearance: frontal view.