

PEDIATRICS

UNDER THE CHARGE OF

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Impaired Resonance at the Apices in Children.—FR. MIELKE (*Berlin klin. Woch.*, 1914, li, 1218) contributes interesting investigations bearing on the diagnosis of impaired apical resonance in children, and offers 18 cases to illustrate his points. In many poorly developed children with pallor and loss of appetite, an impairment at one apex would generally indicate apical tuberculosis. If, besides this, there is a poor family history, a positive Von Pirquet or possibly elevated temperature, the diagnosis would seem to be confirmed. On closer study these children are found to exemplify a type characterized by muscular weakness and poor development of the spine and back. In standing they exhibit a marked lordosis with often a slight kyphosis of the lumbar vertebra. The conformity of the vertebra is still infantile and in this position a slight scoliosis exists. Asked to stand erect the child leans back still farther, increasing the scoliosis. Even a small bending of the vertebral column in a small, elongated thorax will cause a shortening of the percussion note at the apex. If the child's position be corrected by having him lean forward slightly, the arms hanging loosely downward and the abdomen drawn in, the muscles of the thorax will be relaxed, the spine straightened, and on percussion of the apex the impairment present in the erect position will have disappeared. This would indicate that an impairment is only significant when it persists in the corrected posture. Röntgen-ray plates of these cases show the first three ribs lying closer together than normal and the first rib sunk inward, thus narrowing the upper thorax aperture. This fact, coupled with the crooked posture due to muscular weakness, explains the production of the pseudo impairment. The 18 cases cited clearly demonstrate Mielke's contention as most of them seem tuberculous from their general symptoms and the impairment present in the uncorrected posture, but in all of them the impairment disappeared in the correct posture, and röntgen-ray examination showed no pathological change in the lungs, even in cases showing a positive von Pirquet, an elevated temperature, or a tuberculous family history. Mielke suggests that this method applied to apparently tuberculous children might lower the statistical incidence of tuberculosis in childhood.

Three Cases of Acute Lymphatic Leukemia in Children.—MARSH (*Liverpool Medico-Chirurg. Jour.*, 1914, xxxiv, 324) reports 3 cases of acute lymphatic leukemia in children of eleven, four and three years, respectively. Many cases escape recognition because, without a hematologic examination it is almost impossible to differentiate this condition from hemorrhagic purpura, scorbutus, and hemorrhagic septicopyemic conditions. The onset is usually sudden, but may be insidious with weakness, fever, lassitude, and dyspnea. The most striking

manifestation is the hemorrhagic diathesis causing hemorrhages into the subcutaneous tissues and bleeding from the mucous membrane of the mouth, the nose, and the urogenital and gastro-intestinal canals. The characteristic feature in the blood is the great increase in the lymphocytes with a preponderance of the large variety. The percentage of lymphocytes in the cases recorded by Marsh is 93 per cent. and 94 per cent. Petechiæ occurred in all the cases, but the spleen was not enlarged. The enlargement of the lymph nodes is never as marked as in the chronic form of leukemia. Other clinical features of the disease are lymphoid infiltration of the liver with consequent enlargement, progressive emaciation and cachexia, increased secretion of uric acid and in most cases moderate fever, often typhoid or septic in type. The reported cases all died within two or three weeks of the onset of the acute symptoms. Two cases followed the extraction of a tooth which seemed the start of the bleeding from the mouth. Horse serum, arsenic and rest had no effect on the course of the disease. Röntgen-ray therapy in a few cases has caused a reduction in the lymphocytes to normal or below, and diminished the size of the lymph nodes and liver temporarily, but this was always followed by a very rapid return of all these conditions followed by death in all the cases. The generally accepted view of the etiology of the disease, is that it is caused by some toxins manufactured within the body.

The Incidence of Pulmonary Tuberculosis in Children.—McLELLAN (*Liverpool Medico-Chirurg. Jour.*, 1914, xxiv, 333) makes deductions on the incidence of pulmonary tuberculosis in children from the recent investigations in this field. It is fairly generally accepted that the vast majority of children under the age of twelve years have been subjected to the attack of the tubercle bacillus. In regard to the von Pirquet test McLellan states the belief that as proof of active tuberculosis after the age of three years the test is unreliable. Also that the younger the child the greater the reliance that may be put on the results and that in most cases the only deduction that may be drawn from a positive result is that the patient at sometime or other has been subjected to the attack of the tubercle bacillus. While Moreland's modification of the von Pirquet is most hopeful, no specific method has been devised by which to definitely decide whether the disease is in an active or passive condition. The opinion held by McLellan that glandular infection is a common occurrence and pulmonary tuberculosis is rare, he admits is not shared by the majority of practitioners. Large numbers of children are admitted to hospital with the diagnosis of phthisis, who have slight catarrhal symptoms or glandular involvement and who respond rapidly to ordinary hygienic and medicinal treatment and show no evidence of the disease clinically. McLellan's experience leads him to believe that as far as the lungs are concerned, practically all children suffering from tuberculosis die sooner or later from that disease. The first check on the diagnosis is the discovery of the bacillus in the sputum. The second check is the progress of the disease. While the very frequent cases of fibroid and bronchiectatic affections show the so-called classical signs of tuberculosis, they show the following essential differences from phthisis: No tubercle bacilli are ever found in the sputum.