Section of Pædiatrics

President—CHARLES PINCKNEY, F.R.C.P.

Meeting
November 28, 1958

Congenital Tuberculosis.—J. M. CASHMAN, M.B., D.C.H. (for J. J. KEMPTON, M.D., M.R.C.P.).

J. T., female, aged 7 months.

A 34-week premature baby weighing 3 lb. 11 oz. at birth; delivery was normal. She was admitted immediately to the premature nursery. Six weeks earlier the mother had had an illness described as Asian 'flu but appeared to have recovered completely.

On the second day after delivery the mother developed a temperature up to 101° F. and dyspnœa. The temperature settled in forty-eight hours but the E.S.R. remained high, 80 mm. in one hour (Wintrobe) and radiograph of the chest showed miliary shadows. There was no sputum. Gastric washings were negative. She was tuberculin positive and was known to have had a calcified primary complex at the age of 12.

There is a strong family history; her father died of pulmonary tubercle, her brother had a pleural effusion and her mother and sister both had tuberculosis.

She was transferred to Peppard Chest Hospital and had fourteen weeks' treatment with isoniazid and streptomycin followed by PAS and isoniazid.

She has made a straightforward recovery and remains under observation.

The baby.—The baby made good progress during her first weeks. Mantoux and a chest radiograph at 2 weeks were negative.

She was 5 weeks and 5 days old when, quite suddenly, she became limp and refused her feeds. The same evening she was dyspnœic, coughing and pale. There was diminished air entry at the right base and enlargement of the spleen and lymph glands in neck and axillæ. No choroidal tubercles were seen. A radiograph of the chest showed impaired translucency at the base of the right upper lobe, the right middle lobe and part of the right lower lobe (Fig. 1).

Gastric washings were positive for tubercle bacilli on culture and guinea-pig inoculation. Mantoux 1/1,000 was doubtful at 6 weeks but she had a positive Heaf test at 9 weeks confirmed by a further Mantoux.

She was started on streptomycin 20 mg./lb. and isoniazid 20 mg. daily.

For the first three days she remained ill and needed oxygen and tube feeding. She ran a low-grade fever for a week. After this she made good progress for a month when she had a series of convulsions. C.S.F. then showed 2 lymphocytes/c.mm. Protein 90 mg./100 ml., sugar and chlorides normal. Culture for tubercle bacilli negative.

She was given phenobarbitone and the

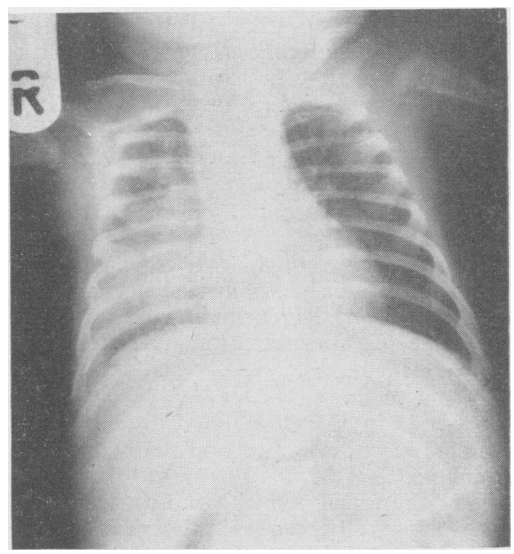

FIG. 1.—Age 6 weeks: Chest X-ray showing impaired translucency in right mid-zone.

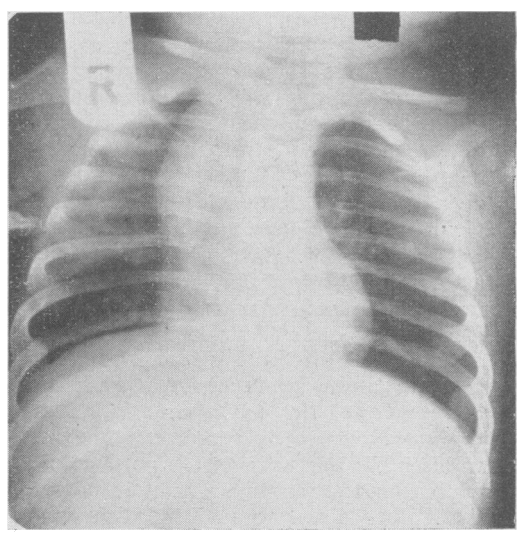

FIG. 2.—Age 6 months: Chest X-ray after 18 weeks' treatment.

isoniazid was reduced to 5 mg. daily as it was thought possible that the comparatively high dose might be toxic.

Since then she has done well. Streptomycin was stopped after three months and she was given isoniazid 10 mg. daily and PAS 3 grams three days a week for three months more. She left hospital on 20.9.58 aged 4 months weighing 13 lb. 12 oz. She is a happy baby and appears to be healthy and developing normally. Her hearing seems to be normal. Chest film shows almost complete clearing (Fig. 2).

Discussion.—In 1935 Beitzke said that in a case of supposed congenital tuberculosis it must be shown that the disease process was tuberculous and that it was present at birth or within a few days or, in cases presenting later, that the primary complex was in the liver or extra-uterine infection was excluded by separation from the mother at birth and segregation from any other possible source of infection.

This baby certainly had tuberculosis, was separated from her mother and developed signs while still in the Premature Baby Nursery. She was never in contact with the father or other possible infectors.

Reported cases of congenital tuberculosis were reviewed by Corner and Brown in 1955. They found 133 cases in the world literature and added another; 3 of these had been treated and survived.

I have found accounts of 11 more, including 4 survivors (Riordan, 1955; Fouquet *et al.*, 1955; Hudson, 1956; Andersen and Fredhjem, 1954; Wayl and Stein, 1958).

Infection in congenital tuberculosis may occur in several ways. There may be hæmatogenous spread from miliary foci in the placenta to the liver when the illness may present as jaundice, or through the ductus venosus giving multiple lesions in the lungs. The liquor amnii may be infected either from the placenta or, after rupture of the membranes, from a tuberculous endometritis. Infected liquor may be swallowed, giving primary infection in the gut, or inhaled, giving a lung primary. It is probable that this was the mode of infection in our case and that, as one would expect in the newborn, there was rapid dissemination of infection giving lymph gland and spleen enlargement.

Congenital tuberculosis is a rare disease but since it can now be successfully treated it should be considered in the diagnosis of atypical respiratory illness or jaundice in the first few weeks. The tuberculin test is not helpful at the onset. Gastric washings should be cultured and the mother X-rayed and, if the diagnosis seems likely, treatment should be started while awaiting bacteriological proof; if it is delayed the baby will die.

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Juvenile Xanthomatosis—Histiocytosis-X.—B. GANS, M.D., M.R.C.P.

B. U., male, born 7.2.58. Only child. No family history of xanthomatosis. Developed (according to his mother almost overnight) five raised, firm, painless, yellowish-pink, damson-sized lesions on his scalp at the age of 6 weeks. Progress before and since the appearance of eruptions has been normal. When first seen, aged four months (Fig. 1), had, in addition to

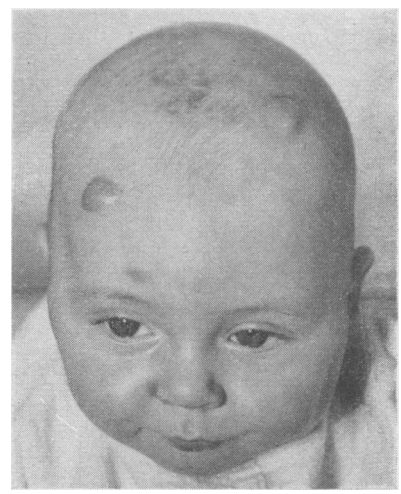

FIG. 1.

the scalp lesions, flat, reddish-brown, firm infiltrations of indistinct outline on his left arm, right leg, above his right eyebrow, and to the right of his nose. His liver and spleen were enlarged, 6 and 3 cm. respectively, below the costal margins.

A biopsy of a scalp node (Fig. 2) was reported (Dr. M. O. Skelton) as a histiocytoma, a local manifestation of a histiocytosis-X or Letterer-Siwe disease. Serum cholesterol 133 mg.%. Skeletal survey at 4 months and again at 9 months: no bone lesions. Blood count: Hb 65%, W.B.C. 5,500 (polys. 14%, eosinos. 1%, lymphos. 82%, monos. 3%).