

The occurrence of autoantibodies in infectious hepatitis may be an example of autoantibody formation following intracellular infection (Davis, 1944).

The patient with thymoma and aplastic anaemia who gave a positive antinuclear factor test was of particular interest. The association of thymoma with myasthenia gravis in which antibodies to muscle occur (Strauss, Seegal, Hsu, Burkholder, Nastuk, and Osserman, 1960) suggests that the thymus may play a part in autoimmune disease. The occurrence of antinuclear factor in a patient with thymoma provides circumstantial evidence for this view.

Hijmans *et al.* (1961) and others have shown that antinuclear factor is nearly always present in systemic lupus erythematosus. Our finding that it is usually absent in blood and liver disorders underlines the value of the antinuclear factor test in the diagnosis of systemic lupus erythematosus.

Summary

Tests for antibodies commonly associated with autoimmune disease were carried out on sera from patients with blood and liver disorders. Antinuclear factor was definitely present in one case of scleroderma with agranulocytosis, one case of thymoma with aplastic anaemia, and one case of infectious mononucleosis.

Complement-fixing antibodies against rat liver and kidney were significantly raised in 7 of the 13 patients with infectious hepatitis and in two of the seven patients with glandular fever.

The latex test for rheumatoid factor was positive in 10 of the 22 patients with liver disease.

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Medical Memoranda

B.C.G. and Sarcoidosis

Scadding (1960) restated his view that most cases of sarcoidosis seen in England are probably a manifestation of a tuberculous infection. He also considers that "there may well be other agents, known and as yet unknown, besides the tubercle bacillus, which can cause sarcoidosis in a susceptible individual."

That B.C.G. may be such an agent has been suggested by reports of cases of sarcoidosis occurring after B.C.G. vaccination (Larsen, 1950; Richards and Steingold, 1952; Pfisterer *et al.*, 1954; Birkhäuser, 1957; Fried and Genz, 1958; Ellman and Andrews, 1959). It cannot be denied that most or all such cases may be no more than mere coincidence (Törnell, 1954). However, five of Larsen's (1950) eight cases were found to have bilateral hilar lymphadenopathy only one to four months after B.C.G., having had normal chest x-ray pictures immediately before B.C.G. in four cases and immediately after in the fifth. He considered a coincidental relationship unlikely.

The case described developed symptoms attributable to sarcoidosis within 48 hours of a B.C.G. vaccination. This is probably the most dramatic temporal relationship of sarcoidosis to B.C.G. yet published, and is reported in the belief that it may throw some light on the mystery surrounding the aetiology of sarcoidosis.

CASE REPORT

A coloured nurse from British Guiana was found to be Mantoux-positive at the start of her training in England in 1956 at the age of 25. In February, 1961, a routine chest x-ray film was normal. In March, at the start of a health visitors' training course, she was found to be Heaf-negative—this is approximately equivalent to 10 tuberculin units (T.U.) (Stewart *et al.*, 1958)—and was given B.C.G. (0.1 ml. intradermally of fresh liquid vaccine batch No. 1454, prepared by the State Serum Institute, Copenhagen, and supplied by the Ministry of Health). This produced, according to the patient herself, a papule after a few days, a small ulcer after two to three weeks, and later healing.

In August she was still Heaf-negative, and on 18th of that month was given a further dose of B.C.G. (batch No. 1477) as above. The local reaction, according to the patient, followed an identical course to that of the March vaccination.

However, having been entirely well and symptom-free throughout this period, she developed breathlessness on exertion, with cough and a little mucoid sputum, 24 to 48 hours after this second B.C.G. Within two weeks she also had retrosternal pain on coughing, malaise, and fever, with persistent vomiting, and a few days before being first seen at University College Hospital on September 22 she noticed swelling of her face and bilateral conjunctivitis. A chest x-ray examination on September 15 showed bilateral hilar lymphadenopathy.

On admission on October 4 she was unwell, with a continued pyrexia of about 100° F. (37.8° C.), and had lost 22 lb. (10 kg.) during her illness. The recent vaccination site showed a scab on a healed ulcer about 1 cm. in diameter, with only a flat scar at the March vaccination site. Both submandibular salivary glands were palpably enlarged and non-tender, and there was bilateral conjunctivitis. Slit-lamp microscopy (Mr. E. J. Arnott) showed translucent follicles scattered throughout the conjunctivae, especially in the lower palpebral fissures, but also on the ocular conjunctivae. This appearance was thought to be suggestive of a sarcoid conjunctivitis, but unfortunately conjunctival biopsy gave an inadequate specimen for histological confirmation. There

Correction.—The beginning of the second paragraph of the summary of the paper by Drs. Hugh Garland and David Sumner and by Mr. J. M. P. Clark (March 2, p. 581) should have read as follows: "The most frequent symptom is pain, which may involve the whole hand or extend up to the shoulder. The second commonest symptom is tingling, which is limited to the hand."