

**SHORT REPORTS**

**Oldest case of sarcoidosis in the world**

Acute sarcoidosis in an octogenarian is rare. In this case bone-marrow trephine biopsy uncovered an unsuspected diagnosis.

**Case report**

An 81-year-old spinster presented with a six-month history of anorexia, weight loss of 6-35 kg, and lower abdominal distension which was always relieved by an episode of diarrhoea. The only other symptoms were night sweats and nocturnal leg cramps, both of which had lasted for one month.

Her history included Bell’s palsy at the age of 70, a severe epistaxis requiring hospital admission when she was 79, and longstanding congestive cardiac failure, which had been controlled by digoxin and diuretics. These were her only medications.

On examination she had no fever, there were palpable mobile lymph glands in both axillas and both inguinal regions, her liver was enlarged 3 cm below the costal margin, but her spleen was not palpable. She had a persisting partial right facial nerve palsy. Chest x-ray examination showed bilateral hilar lymphadenopathy. The result of the Mantoux test was negative with 10 IU of purified protein derivative. Haemoglobin concentration was 12-5 g/dl; mean cell volume 81 fl; white blood count 10·9 x 10^9/l, with a slight lymphocytosis; erythrocyte sedimentation rate 84 mm in the first hour; urea and electrolytes normal. Serum aspartate aminotransferase activity was transiently raised up to 31 IU but returned to normal without changes in the electrocardiogram. Serum protein concentration was 95 g/l, and electrophoresis showed decreased α1-globulin with increased gammaglobulin. Serum and 24-hour urinary calcium concentrations were normal. Results of respiratory function tests were as follows: forced vital capacity 1·5 l, forced expiratory volume in 1 s 1·0 l, transfer factor reduced at 2·0 mmol/min/kPa (6·0 ml/min/mm Hg) (predicted value 6·4 mmol/min/kPa (19·0 ml/min/mm Hg)). Ophthalmological examination, including slit-lamp inspection and lacrimal gland secretion, showed no abnormality. X-ray examinations of the hands and feet showed them to be within normal limits for age. Tissue for histological examination was obtained in the first instance by Jamshidi trephine bone-marrow biopsy. This showed scanty normal marrow elements with deplated iron stores and multiple non-caseating granulomas (see figure). Sections of a biopsied axillary lymph node showed multiple small non-caseating epithelioid and giant-cell granulomas. The result of the Kveim test (Colindale K19 type 1 lot 9) was strongly positive on histological examination.

**Comment**

The patient was found to have peripheral lymphadenopathy and bilateral hilar lymphadenopathy. The symptoms of night sweats led to a suspicion of a lymphoma, and we performed a marrow biopsy to save her from undergoing general anaesthetic for a lymph-node biopsy. This showed non-caseating granulomas. A full investigation for sarcoidosis followed.

Acute sarcoidosis was diagnosed by the finding of multiple system disease with non-caseating epithelioid and giant-cell granulomas, along with a positive Kveim test and negative tuberculin test.

We believe that this is the oldest patient with acute sarcoidosis ever reported. Population surveys and large series of cases of sarcoidosis¹ have shown a peak incidence in adults aged 20 to 40 years. Most cases reported outside this age group have been below the age of 15,² and cases presenting after 70 years are extremely rare, although Haught³ has described the clinical course and necropsy findings in an octogenarian with chronic sarcoidosis of 30 years’ duration.

Within a period of six weeks our patient’s symptoms had resolved, although results of a chest X-ray examination at six months had not altered. Clinical examination showed spontaneous resolution of the peripheral lymphadenopathy, and the patient continues to improve. Corticosteroid treatment was not given.


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**Levodopa dosage and ventilatory function in Parkinson’s disease**

Ventilatory function is impaired in many patients with Parkinson’s disease. This is apparently due to the disease itself and may relate to its severity.¹ Mehta et al reported that simple tests showed improved ventilatory function when patients with Parkinson’s disease were treated with levodopa and suggested that measurement of ventilatory function might provide an objective index response to treatment. We examined the relation between the clinical signs of Parkinson’s disease and various tests of respiratory function in patients receiving varying doses of levodopa in a double-blind randomised trial.

**Patients, methods, and results**

Three men and three women with Parkinson’s disease aged 62-78 agreed to participate in the study, which was approved by the area health authority ethical committee. They were already being treated with levodopa and carbidopa in combination, Sinemet, which had been titrated before the study to an optimal dose as judged by clinical response. The mean levodopa dose was 310·7 mg/day combined with 31·7 mg of carbidopa. The study periods each lasted three weeks, during which the patients received in double-blind fashion and randomised order doses of levodopa that were respectively 30 % more, 30 % less, or the same as their previous “optimum” dose. The daily total number of tablets was constant throughout the study, the tablets were individually packaged, and, when appropriate, placebo tablets were included to maintain the double-blind design. The mean doses of levodopa in each phase were 216·7 mg, 416·7 mg, and 316·7 mg with appropriate doses of carbidopa.

Assessments at the end of each treatment phase consisted of a clinical symptom and sign score,² lying and standing pulse rate and blood pressure, self-scored visual analogue scale, and pulmonary function tests. The pulmonary function tests included peak flow rate, forced expiratory volume in one second, vital capacity, maximum voluntary ventilation, and measurement of maximum inspiratory and expiratory pressures. The patients were all trained in the performance of the pulmonary function tests before the formal study and were selected on the basis of an ability to co-operate with the tests.

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**Figure:** Tissue from trephine bone-marrow biopsy showing scanty normal marrow elements and multiple non-caseating granulomas. Haematoxylin and cosin × 200 (original magnification).