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This 47-year-old white man was admitted because of ten-pound weight loss, anorexia, and night sweats for three months. He appeared chronically ill and wasted. His temperature was 38.5°C. Shotty cervical and axillary nodes were present. Scattered rales were heard over the left apex. The heart was normal. The spleen was palpable at the left costal margin. The liver was not palpable. The hematocrit was 32 per cent and the white blood cell count, 7,500. The tuberculin test (PPD 5 T.U.) was positive (10 mm. of induration). Fungal skin tests and serologic tests were negative. Numerous sputum examinations failed to reveal M. tuberculosis, fungi or pyogenic organisms.

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Diagnosis: Hodgkin's Disease with Cavitation

Figure 1 shows hilar adenopathy and scattered infiltrative pulmonary densities. A 3 cm. cavity has been present in the left apex, better demonstrated in the tomogram. (Fig. 2). Hodgkin's disease had been diagnosed ten years previously by supraclavicular lymph node biopsy. Marked improvement had been gained initially with local irradiation, nitrogen mustard, and more recently, vinblastine therapy. Recent treatment with INH and PAS for suspected tuberculosis brought no improvement. The patient's course was gradually downhill and he expired three and one-half months after admission.

At necropsy, the apical posterior segment of the left lung contained a 3 cm. cavity. It was thick-walled and contained necrotic material. The cavity wall consisted of a network of connective tissue, reticulum cells, Reed-Sternberg cells, monocytes and a few granulocytes (Fig. 3). The lumen of the cavity is seen in the upper right-hand part of Fig. 3. Acid-fast and periodic acid-Schiff stains did not reveal acid-fast bacilli or fungi. Cultures for pyogens, fungi and tuberculosis were non-revealing. Hodgkin's granuloma was also found in the hilar nodes and scattered throughout the lung parenchyma.

Pulmonary parenchymal involvement by Hodgkin's disease is found in 35 to 40 per cent of necropsies of patients who die with this disease. Pulmonary involvement may occur any time during the course of the disease, but is most commonly encountered during the latter part of the illness. Thus, pulmonary involvement is considered a bad prognostic sign. Cavitation occurring in Hodgkin's disease is usually due to the concomitant infection. Only 13 well documented cases of cavitation due to Hodgkin's disease per se have been previously reported. Occasionally, Hodgkin's disease may be confined to the lungs.

Since serious infections commonly occur in patients with Hodgkin's disease, a careful search for an infectious cause of a cavity is mandatory. Numerous sputum examinations for acid-fast bacilli, fungi and pyogens, as well as serologic tests for fungi, should be performed.

References


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