

COR PULMONALE SUBACUTE AND RECURRENT ERYTHEMA NODOSUM LEPROSUM

We would like to report an unusual case of a lepromatous leprosy patient, with recurrent ENL in the lower limbs, who presented with deep thrombophlebitis with subsequent multiple pulmonary embolism.

In 1989, this patient was submitted to the leprosy treatment scheme recommended by the WHO for a consecutive 2-year period,¹ during which time recurring Type II reaction or erythema nodosum leprosum (ENL) took place both isolatedly and in conjunction with systemic alterations, namely fever, arthralgia, anorexia, and other signs and symptoms typical of the toxic state. In addition, neurological alterations also occurred, in the form of spontaneous pain and swelling of the posterior tibial and ulnar right nerves. During the reactional states, 300 mg/day of thalidomide and 50 mg/day of prednisone were administered with gradual dose reduction upon observation of clinical improvement. The patient was discharged at the end of the treatment and on our recommendation he continued taking the prescribed medication and returned to the Leprosy Care Centre within a year.

Approximately 10 months after discharge, he came to the Centre Unit with signs of ENL together with acute cor pulmonale as a result of repetitive pulmonary embolism (Figure 1), in connection with thrombophlebitis and panniculitis in the lower right limb. He informed the staff that the current episode had actually begun around 45 days before and that the symptoms at the time had been fever, arthralgia of the right ankle and knee, oedema in the right foot, and pleuritic-type pain in the thorax. In addition, the staff was also informed that during that same period he had been admitted to a private hospital which was unaware of his leprosy condition and had been diagnosed as having pneumonia. He was released 15 days later without improvement, then readmitted to another hospital with fever, arthralgia, and repetitive abrupt dyspnoea together with fainting spells. He was diagnosed as having congestive cardiac insufficiency and diuretics were prescribed. He was discharged again with a slight improvement of his clinical symptoms.

Once at the Centre, the patient was immediately examined and found to have a fever,

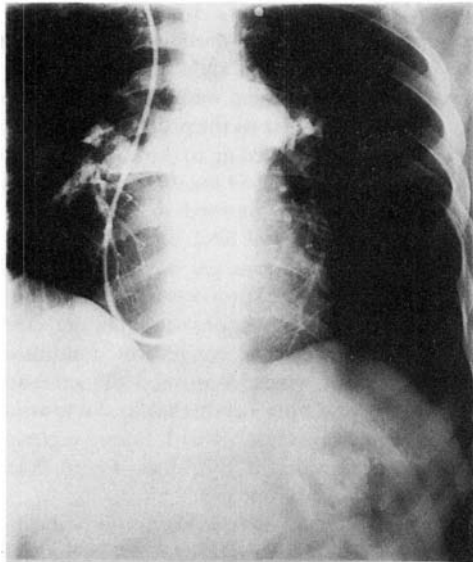


Figure 1. Pulmonary angiography which has confirmed the presence of massive bilateral pulmonary embolism.

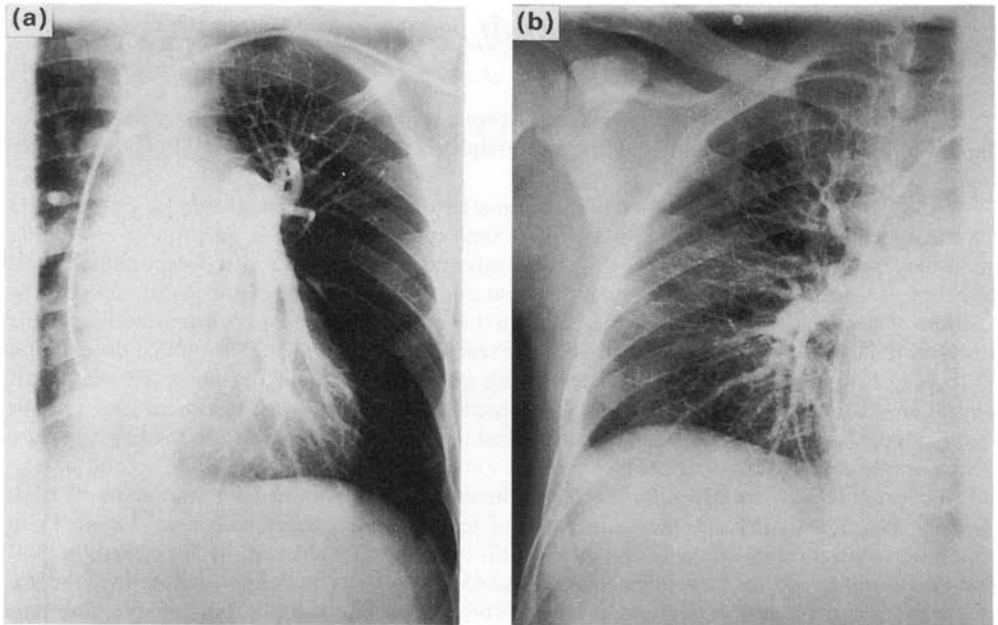


Figure 2 (a) and (b). Pulmonary angiography after anticoagulant therapy. Lysis of the clots and improvement of pulmonary perfusion was observed.

tachycardia, tachypnea, an arterial pressure of 120/80 mmHg, and a venous pressure of 15 cm H₂O. The precordial examination revealed propulsive and sustained ictus of the right ventricle, palpable pulmonic valve closure (P₂), regular cardiac rhythm, presence of the 4th heart sound of the right ventricle, fixed splitting of the 2nd heart sound, and *p*₂ hyperphonetic systolic murmur of tricuspid regurgitation. On listening to the pulmonic midsystolic murmur, the lungs showed a diminished vesicular whisper in the lower 3rd part of the right thorax, without adventitious noise. The abdominal examination showed a liver of 18 cm with a congestive positive abdominal-jugular reflux, while the dermatology examination showed the presence of ENL, both isolated and in crops, situated on the lower limbs. Oedema was observed up to the knee on the lower right limb, along with hardening of the thigh and calf with the increased local temperature diagnosed as panniculitis.

After the examinations, the patient was interned in the Evandro Chagas Hospital of the Oswaldo Cruz Foundation with the diagnosis of ENL and subacute cor pulmonale. He had been taking 100 mg thalidomide and 20 mg prednisone per day on a regular basis up to that time and upon hospitalization an anticoagulation medication was prescribed and prednisone was increased to 60 mg. But even though a positive treatment response could be detected after 8 days of treatment, recurrences of dyspnoea and systemic venous congestion continued to persist. Whereupon pulmonary angiography was performed which confirmed the presence of bilateral pulmonary embolism, so it was decided to implant a filter (umbrella) in the lower cava vein below the renal veins. The patient thereafter progressed satisfactorily with a rapid regression of the signs of systemic venous congestion and absence of recurrences of dyspnoea (Figure 2(a) and (b)). After 20 days he was discharged from the hospital without symptoms.

To date, there has been no written evidence of deep venous involvement having a significant effect as it had in this particular case.²⁻⁵ There also seems to be no previous knowledge of a leprosy patient showing such exaggerated local signs associated with the development of massive repetitive

pulmonary embolism, while lacking any other of the preconditions for venous thrombus. Thus, the purpose of this report is to alert leprosy health care personnel to the possibility of the occurrence of strong venous involvement in leprosy patients and development of acute pulmonary embolism.

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