Lymphocytic Interstitial Pneumonitis
Following Legionnaire's Pneumonia

To the Editor:

The two cases described by Hüter et al. in the January 1992 issue of *Chest* are of particular interest in that infiltrating lymphocytes and plasma cells were present. This suggests a diagnosis of lymphocytic interstitial pneumonitis (LIP), a form of chronic interstitial lung disease. We would like to report a similar case that we recently encountered.

In May 1991, a 45-year-old white woman without prior lung disease presented for evaluation of a chronic dry cough and dyspnea on exertion. A chest x-ray film revealed bilateral lower lobe interstitial lung disease. The patient was treated empirically with erythromycin with a good clinical response. A * Legionella pneumophila* IgG titer was strongly positive at 2.23 (positive being greater than 1.00). The patient's son, interestingly, had been ill several weeks earlier with similar symptoms, including cough, an abnormal chest x-ray film, and a strongly positive IgM *L. pneumophila* titer greater than 1:10,240 (reference range, titer < 1:64). In this clinical context, it was considered that the patient had acute Legionella pneumonia. Treatment with erythromycin resulted in improvement in the chest radiographic appearance, decreased cough, decreased dyspnea on exertion, and an increased vital capacity (from 1.65 to 1.88 L, the latter being 56 percent of predicted).

There was no clinical history to suggest extrinsic allergic alveolitis and no evidence of toxic drug exposure. Testing for HIV was negative, and there was no evidence of systemic lupus erythematosus. Serum glutamin levels were normal, and there was no evidence of chronic active hepatitis.

During the next 6 months symptoms returned with slow, insidious dyspnea on exertion and a dry, nonproductive cough. Chest radiography showed a fine interstitial pattern, and pulmonary function studies showed persistent restrictive abnormalities and mild diffusion impairment.

An open-lung biopsy revealed moderately severe chronic interstitial pneumonitis with a predominant lymphoid interstitial process without granulomas or vasculitis.

Since the initial description of LIP in 1966 by Carrington and Liebow,* LIP has been associated with Sjögren's syndrome, myasthenia gravis, chronic active hepatitis, and AIDS.† We believe that this specific histologic pattern may be of significance since LIP is not only distinctive, but is an entity the pathogenesis of which is poorly understood. We believe that further investigation of the association with Legionnaire's disease is warranted.

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To the Editor:

We were most interested in the case report of Diicico and Anderson, which further substantiates our observation that acute *L. pneumophila* pneumonia may cause long-lasting pneumonitis. Furthermore, there seem to be striking similarities between these cases and well-known pathoanatomic entities of idiopathic interstitial pneumonitis. In our opinion, prospective studies should focus on the follow-up of patients with acute Legionella pneumonia to define the incidence, natural course, and benefit from corticosteroid treatment of the chronic alveolitis. In addition, antibodies to *L. pneumophila* should be determined in cases of interstitial pneumonitis of unknown origin.

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Mycobacterium kansasii Infection
Following Primary Pulmonary Malignancy

To the Editor:

We read with interest in the November 1992 issue of *Chest* the article by Zvetina et al., concerning the association of bronchogenic carcinoma and the subsequent development of *Mycobacterium kansasii* pulmonary infection following either chemotherapy or radiation therapy. Of interest is their conclusion that structural changes induced by either the chemotherapy or radiation therapy predispose the patient to reactivation of latent *M. kansasii* infection.

We report a recent case in which a patient presented *de novo* with simultaneous *M. kansasii* pulmonary infection and small-cell lung carcinoma, a previously unreported occurrence.

A 70-year-old black man with a medical history of asthma and non-insulin-dependent diabetes mellitus presented with a 20-lb (9-kg) weight loss, progressive shortness of breath for 2 months, and hemoptysis for 1 week. The admission chest radiograph was consistent with granulomatous disease, with a left hilar mass and diffuse fibronodular markings. The patient was treated empirically with antituberculosis medications, although initial acid-fast smears were negative. Computed tomography of the chest was suggestive of neoplasia, and an open-lung biopsy revealed small-cell carcinoma, undifferentiated type. Shortly thereafter the admission sputum cultures obtained on 4 separate days all grew *M. kansasii*. The antituberculous medications were continued, and the patient was also treated with VP-16 for his malignant condition. The patient showed a clinical response to the *M. kansasii* infection with subsequent sputum conversion; however, he died on hospital day 128 secondary to complications of the small-cell carcinoma.

Although several reports have documented the association between *M. kansasii* pulmonary infection and bronchogenic carcinoma, one to date has documented the simultaneous presentation of *M. kansasii* infection with small-cell carcinoma. This case illustrates that this particular malignant condition can cause reactivation of latent *M. kansasii* infection independent of either chemotherapy or radiation therapy. Although the exact mechanism of *M. kansasii*-induced reactivation remains speculative, several theories have been advanced for the reactivation of latent *M. tuberculosis*, including disruption of granulomas by either cancer cells or tumor antigens and the effects of generalized malnutrition and wasting, which often accompany solid tumors.*

To the best of our knowledge, this is the first documented case of concomitant *M. kansasii* infection and primary small-cell lung carcinoma, independent of other immunosuppressive agents. The significant findings are (1) the documented ability of small-cell...
carcinoma to reactivate latent *M. kansasii* disease, and (2) the presentation of these two processes simultaneously in the same patient, a heretofore-undocumented finding. These observations should alert physicians treating patients with lung neoplasia to obtain sputum specimens for acid-fast organisms both prior to and during treatment.

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**To the Editor:**

We agree with Drs. Gettler and El-Sadr that there has been no specific report on simultaneous presentation of *M. kansasii* infection and small-cell carcinoma. Indeed, we found only one publication with specific reference to active *M. kansasii* infection coexisting with any primary lung malignancy. In that series of 44 patients with pulmonary isolates of *M. kansasii*, six were found to have bronchogenic carcinoma; no detailed history of the malignancy was given. The scarcity of the report is the reason we are about to submit an article for publication on this association. We do not believe, however, that small-cell carcinoma is unique in its ability to reactivate latent *M. kansasii* disease, since this carcinoma represents only one case in our series in which the two diseases coexist.

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**REFERENCE**


**The Wonderful Floating Features in Medical Imaging of Chronic Aspirated Motor Oil in the Lung**

**To the Editor:**

I read the paper of Dr. Van den Plas and colleagues with great interest. It involved a very rare case of chronic inhalation of a motor oil substance into the lung with gravity-dependent shifting phenomenon in chest imaging. It showed that the light oil substance may move freely into any portion of the lung by gravity with notably distant migration. All three figures show the same horizontal upper level accumulations. This indicates that a large amount of this light motor oil was freely movable inside the lung. Although some of the small particles of this particular oil substance were phagocytized within the alveolar macrophages, most of them were treated as nonabsorbable material in the lung in this particular case. A large portion of the oil was distributed in the lower part of the lung no matter what position the patient was in. The large volume of light motor oil did not adhere to any part of the lung but moved freely along the bronchial tree from top to bottom as the patient’s position determined. It was evident that this oil substance could freely leave the air space and flow into the small bronchi even to the segmental bronchus and then disseminate to other segmental regions of the other lung. Therefore, to me, this kind of light flowing oil substance cannot be treated as a pneumonic-inducing material because it is foreign and isolated to the lung tissue. I am strongly against using the term “itis” in such cases. This case somewhat resembles a case described in the late 1950s where we had a chance to observe closely the rapid absorption of the intrapulmonary hemorrhages in leptospirosis icterohemorrhagica. As soon as antibiotics were started, the diffuse mottlings or even big patches in the lung promptly absorbed within 1 to 3 days, according to whether the disease processes were in the early or late stages. That is to say, the lesions vanished very quickly, so they were not pneumonic in nature. Therefore, we concluded that this was not an inflammatory process in the lung, but a toxic effect causing diffuse intrapulmonary hemorrhages. We prefer to use the term pulmonary manifestations in leptospirosis rather than leptospirochetotic pneumonia.

Although these two conditions are quite different in nature, the noninflammatory pathologic findings in the lung were the same. Therefore, this case of motor oil accumulation in the lung should not be catalogued as lipid pneumonia. A word for its management: I suggest that it could be treated with pulmonary lavage, and I think that this light oil substance could be wiped out easily.

At any rate, this special case illustration is very interesting and wonderful in film reading, and I think it is a treasure in modern chest imaging.

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**Public Health and Tuberculosis**

**To the Editor:**

No one can disagree with the public health measures for the control of tuberculosis set forth by Drs. Dunlap and Bailey. I wish, however, that these doctors had mentioned the necessity of detaining uncooperative patients until they finish a course of effective therapy. Such a long-term detention measure, with constitutional protections, has just been adopted by the New York City Department of Health.

Medicine is truly a kinder and gentler profession than the law, and physicians are not accustomed to forcing people to do things against their will. Also, public health officials tend to be politically liberal. But to control tuberculosis, compulsion will sometimes be necessary.

I understand that federal law provides public officials who act objectively reasonably and in good faith, with immunity from suit for deprivation of rights: in detention cases, the right to liberty.

You might like to hear about my own experience as a four-time federal civil rights defendant. I worked part-time in a jail for some 11 years. Prisoners have easy access to federal courts...