1) Asbestos body counts were done per gram of wet lung.
2) Instrumental condition and dimension are ZAF correction 15.00
   KV, VFS 2,048.
3) For SEM sample, we used uncoated fibers. Samples we examined
   were lysed with sodium hypochlorite and partly modifications
   of uncoated fibers were observed. Because of this, we examined
   these asbestos fibers by TEM also, confirmed the typical structure "scroll"
   in these asbestos and determined these fibers also be chrysotile.
4) Dr. Abraham is oblivious to the fact that the spectrum of
   tremolite in x-ray spectrum analysis is very similar to that of
   chrysotile. This explains why we did not emphasize the x-ray spectra
   of asbestos fibers. It is clear that our conclusions and interpretations
   were well within the scope of our data.
5) In this paper, almost all data were dependent on light microscopy;
   only 20 asbestos fibers were examined by x-ray analyzer. We want
   to examine much more asbestos uncoated fibers obtained from cases
   with lung cancer and have now started this study using TEM.
6) Dr. Abraham questions the exposure of Kure City residents to
   asbestos bodies, but more than 40 years have passed since such
   exposure could have occurred. How can one quantify exposure 40
   years after an event?  
7) There are five cases of asbestosis in these 51 lung cancer cases,
   but all of these have a low grade of lung fibrosis.

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Diagnosing Thymic Neoplasia

To the Editor:

I am having great difficulty accepting the diagnosis of thymic
neoplasia in the report by Dr. Asamura and co-workers (Chest
1986; 94:49-4). Case 1 appears to be a case of T4N2 lung cancer,
and its light micrograph includes a structure which seems possibly
as a rosette of a malignant carcinoid tumor. Case 2 appears also to
be lung cancer T3 as best I can tell—and large cell anaplastic not
otherwise classifiable on the light micrograph.

The criteria used by the authors to diagnose thymic epithelial
origin seems to have been: tumor involvement of the thymus,
lymphocytes admixed with epithelial tumor cells (particularly in
case 2), and epithelial cells both leuk and keratin positive.

Both tumors look cytologically malignant from the photographs
and thus qualify as thymic carcinoma provided that thymic origin
was proven. To prove this, it is generally accepted that lung origin
must be excluded, since tumors of the lung and tumors of the
thymus are known to be histologically similar. 1 Lung origin has not
been excluded in these two cases (indeed, it seems most likely).

Lung cancer quite often is associated with a mononuclear host
response which has been shown to be primarily T cell. 4 Thus, while
thymic epithelial tumors often are accompanied by T lymphocytes,
one cannot conclude that an intrathoracic epithelial tumor with
admixed T lymphocytes is necessarily a thymoma.

While the authors' reference 10 does state that leuk 7 decorates
epithelial cells of the normal thymus and thymomas, that reference
also clearly points out the nonspecificity of leuk 7. Leu 7 is known to
be present in small cell and non-small cell lung cancer. 3 Again, I
would argue that, while thymic epithelial tumors are typically leuk
7 positive, one cannot conclude that an intrathoracic epithelial
umor which is leuk 7 positive is necessarily thymic.

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   immunohistochemical study of thymic epithelial tumors, I. Epi-

To the Editor:

The question raised by Dr. Miller seems to be, in part, due to
limited space for the text, including information regarding the
immunohistochemical study and microphotographs.

Indeed, as Dr. Miller pointed out, lung cancer is often associated
with T lymphocytes as a host response to the tumor. Our previous
study demonstrated that these infiltrating T lymphocytes are subset
of OKT6-negative and Leu 4-positive mature T lymphocytes. 4
However, many T lymphocytes seen in association with thymoma
are immature and OKT6-positive. 4 Immunohistochemical study of
the two present cases revealed a significant number of OKT6-
positive immature or cortical T lymphocytes in the tumors; espe-
cially in case 2 numerous immature T lymphocytes were seen
throughout the tumor (not shown in the article). No OKT6-positive
immature T lymphocytes were shown in any of lung cancers
examined. OKT6-positive cells in lung cancers were not lympho-
cytes but Langerhans' cells. 7 Therefore, these two cases presented
are definitely thymomas.

Furthermore, in case 1 the only site of lymph node involvement
by the tumor was the anterior mediastinum. Neither pulmonary
nor hilar nodes were involved. Considering the route of lymphatic
drainage in the lung, the lymph is least possible as an origin of the
tumor.

Histologically and cytologically, tumors of both cases displayed
only slight atypia. The microphotograph of case 1 was presented

Figure 1. Histologic appearance of the tumor in case 1. Tumor is
composed predominantly of epithelial cells with minimal atypia,
indicative of the predominantly epithelial thymoma. H. & E. X179.

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again (Fig 1). The "rosette"-like structure, which was pointed out by Dr. Miller, is a perivascular arrangement of tumor cells, and not a true rosette seen in carcinoid tumor.

We believe that these additional data will convince Dr. Miller of the diagnosis.

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Treating Pleural Effusion

To the Editor:

The case report on treatment of an apparently sterile pleural effusion is of more than casual interest because it recalls the widespread use of streptokinase in the therapeutic plan more than 30 years ago. Contemporary physicians and surgeons unaware of the advantages of chemical debridement are not prone to use this excellent method.

I would suggest, however, that the authors were treating two areas of loculated fluid. The fibrinous barrier between them was lysed by plasmin formed after the injection of streptokinase through the chest catheter. After breach of the fibrin partition, the upper loculation drained into the lower, and then all of the fluid came out through the intercostal tube.

Plasmin is active in a slightly alkaline range (pH 7.4 to 7.5). The slightly alkaline pH of 7.11 (erroneously reported to be acidic) should not materially affect the kinetics of this enzyme-catalyzed reaction.

The ion product of water is approximately 1 x 10^-14 at 25°C. Because equal quantities of hydrogen and hydroxyl ions are present, pH is 7.0 (the neutral point). General usage has associated the term acidosis (as in metabolic acidosis) with a pH of approximately 7.1 which, however, is slightly alkaline. Confusion from the use of two systems of measurement may thus arise.

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Physical Activity After Viral Illness

To the Editor:

As a cardiologist interested in primary myocardial disease, I read Montague et al's "Cardiac Effects of Common Viral Illnesses" with great pleasure.

Somewhat perplexing, however, was Dr. Lerner's extraordinarily detailed accompanying editorial, in which he gives precise rules for allowing certain types and duration of physical activity (or for drinking alcohol, which stresses the myocardium).

We are, thanks to the efforts of scientists such as Drs. Montague and Lerner, beginning to appreciate the pathophysiology which may relate viral infection, repolarization abnormalities and cardiac dilation. Could it be premature, however, to give such specific rules for resumption of activity as listed in the editorial?

We do now know enough about the natural history of viral myocardial illness to give such precise guidelines for undertaking physical activity, particularly to such a young population (mean age 26 years) as Dr. Montague studied. Giving guidelines that are that precise lends the appearance of having a more accurate knowledge of the natural history of viral illness than we now possess.

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Weight Loss in Sleep Apnea

To the Editor:

Gastric surgery is undoubtedly a mode of treatment for morbid obesity, and the recent introduction of the gastric balloon may also be another approach. Such patients often present with obstructive sleep apnea (OSA), and the treatment of their morbid obesity may be helpful in the long term. However, gastric surgery in morbid obesity has a mortality risk, particularly in the 40- to 60-year-old population of patients referred for OSA. (Mortality and morbidity risks may be lower with use of the gastric balloon, but the data are not yet available.) Also, performing gastric surgery will not lead to immediate marked weight loss, and the reduction of OSA will take months to occur. These patients may also be at even greater than usual risk in the immediate postsurgical period due to anesthesia, abdominal pain, reduction of respiratory efforts, etc. If any gastric-related treatment is considered, patients should therefore be protected prior to gastric surgery by a tracheostomy or be fitted with nasal CPAP. These two approaches will allow patients to lose weight over time without the continuous risk of nightly obstructive apneas for months to come. Powell et al have demonstrated that nasal CPAP can be used immediately postextubation in patients with narrow airways who are undergoing surgery, thereby avoiding the need for protective tracheostomy. Last but not least, it has been