mentous organisms compatible with actinomyces. A right pneumonectomy was conducted.

The removed lung measured 10×10×6cm. There was a large(4.5cm) cystic lesion in the center, containing trabeculated structure and yellowish tan necrotic material(Fig. 3).

A small amount of fresh hemorrhage was also noted. Granuloma and sulfur granules were also seen. Bronchiectatic cavity wall showed fibrosis. Microscopic examination showed numerous Gram-positive filamentous bacilli and some neutrophils in the cavity content. The bacilli showed frequent colonized masses(sulfur granules)(Fig. 4). The cavity wall consisted of dilated bronchial structures with complete epithelial denudation, chronic inflammatory cell infiltration and fibrosis. The culture was not carried out with resected specimen.

The usual mode of diagnosis of thoracopulmonary actinomycosis is aspiration, culture, and biopsy as is in the present case. This is the first documented case of thoracopulmonary actinomycosis in this country, and the pathogenesis seems to be related to the aspiration of foreign body.

Pathological Diagnosis

Cystic actinomycosis, right lung

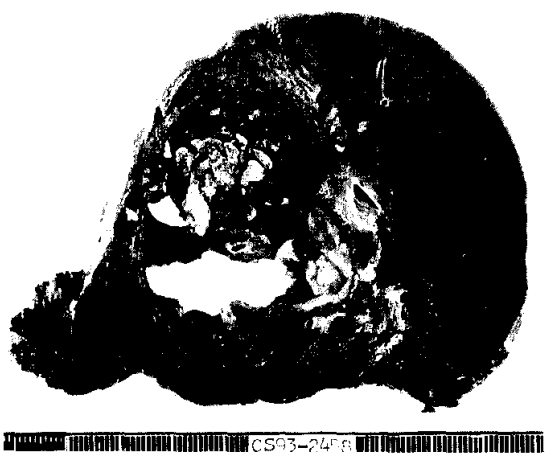

Fig. 3. Gross photograph of the lung, showing a large central cavity that is partly filled with necrotic materials.

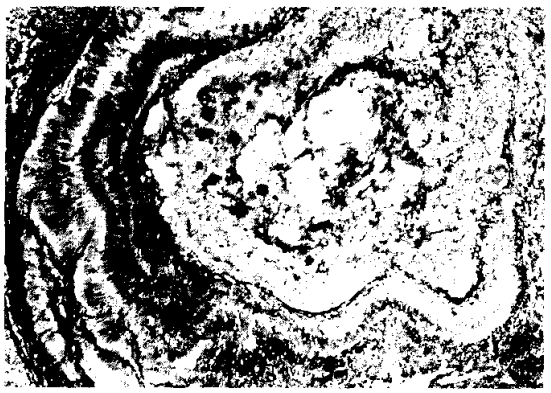

Fig. 4. Photomicrograph of sulfur granule, showing laminated body consisted of numerous filamentous microorganisms.

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