#### **ABSTRACTS**

# SCANNING AND TRANSLUCENT ELECTRON MICROSCOPIC OBSERVATION OF SQUAMO-GLANDULAR JUNCTION IN THE ESOPHAGO-GASTRIC JUNCTION

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Squamo-glandular junction in the esophago-gastric junction was observed by scanning and translucent electron microscope, and the following results were obtained:

- 1) The surface of the squamo-glandular junction was quite distinct under the scanning electron microscopy.
- 2) The squamous epithelial cell of the esophagus and the glandular epithelial cell of the stomach interdigitate with each other. No desmosome can be found in the squamo-glandular junction.

# A STUDY OF TUBERCLE BACILLI ISOLATED FROM PREVIOUSLY UNTREATED PULMONARY TUBERCULOSIS REPORT III

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The present paper is the third report of a continuing study on the primary drug resistance of tubercle bacilli in pulmonary tuberculosis in the Chest Disease Research Institute, Kyoto University, and affiliated hospitals.

In the first and second report, the drug sencitivity test was performed at the laboratory of each hospital where the cultures from previously untreated tuberculosis had been isolated, and a tendency of increase of the primary drug resistant cases between January 1957 and June 1961 was observed.

Since Jaunary 1962, the cultures isolated from previously untreated tuberculosis patients in 16 hospitals have been collected and tested their drug sensitivity at the laboratory atory of the Chest Disease Research Institute, Kyoto University.

Following results were obtained.

- 1) Between January 1962 and December 1967, the incidence of the primary drug resistance to one or more drugs among SM, PAS and INH was 10–17% at the inoculum size of 10<sup>-1</sup> mg per medium and 8—10% at 10<sup>-3</sup> mg/med. No definite tendency of increase was observed.
- 2) Primary drug resistance to the secondary antituberculosis drugs, i.e., KM, CS, TH or EB was less than 2.5% at the inoculum size of  $10^{-1}$  mg/med and less than 0.5% at  $10^{-3}$  mg/med.

The frequency of Viomycin resistant strain was as high as 16.2% at the inoculum size of  $10^{-1}$  mg/med and 1.5% at  $10^{-3}$  mg/med. In this study, any growth on  $100\,\gamma$ /ml of VM or growth on  $50\,\gamma$ /ml of VM, more than 2/3 in quantity to that on the control drugfree medium, was accepted as evidence of resistance. As it was found, however, that H37Rv which was used as a control strain sometimes showed some growth on the medium containing  $100\,\gamma$ /ml of VM, the criteria of VM resistance or the concentration of VM in medium should be modified in further study.

3) Five cases of primary drug resistance suggesting the exogeneous super-infection were found.

## CLINICAL OBSERVATION OF INFECTED CASES OF EMPHYSEMATOUS BULLAE

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The infected bullae have been considered relatively rare. However, eight cases of such infected emphysematous bullae have been observed in our hospital in these recent years. These eight cases have been traced from the early stage of the bullae.

These infected bullae may be found with or without relatively mild clinical symptoms by the routine health examination. Namely they are found on the chest X-ray films with fluid level and surrounding infiltration in mainly upper lobe of the lung.

The fluid level and surrounding infiltration may be absorved rapidly by the intensive chemotherapy. Subsequently the bullae may diminish the size and then disappear almost totally.

The findings from the bronchograms or incidental operations reveals that the pathological changes are located in the very peripheral portion of the air ways.

By these specific clinical teatures the pathological findings, these infected emphysematous bullae could be differentiated from the tuberculous bullous cavity and other cystic or thin-wall-cavity-forming pulmonary diseases.

These clinical and roentgenological events should be taken into consideration on the health examination.

# REMOVAL OF A NEEDLE FROM THE SEGMENTAL BRONCHUS (R·B<sub>5</sub>) USING A FERROPROBE CATHETER WITH SOLENOID

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The hazards of a foreign body in the bronchi is briefly discussed and the importance of the earlier removal is emphasized. The foreign bodies are usually taken out through endoscope but the desirability of the removal without endoscopic management or without thoracotomy is obvious.

A case of successful removal of a needle from the segmental bronchus using a ferroprobe catheter with solenoid is described. This method is simple, safe under the fluoroscopic control and requires equipments available in most hospitals.

## A CASE OF SPONTANEOUS ESOPHAGEAL RUPTURE TREATED SURGICALLY WITH SURVIVAL

#### Yoshio OKADA\* and Isao HIGASHIJIMA\*\*

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A case of spontaneous esophageal rupture was reported. The patient was a 42-year-old man. Four days before admission to our clinic, the patient vomited gastric contents. This was followed by lower thoracic pain, and diagnosis of postemetic esophageal rupture was made. Drainage of empyema was performed for three weeks and then the patient was explored through a left posterolateral thoracotomy disclosing an esophageal perforation in the left anterolateral aspect of the esophagus 5 cm above the diaphragm. The rupture was closed successfully with silk sutures in two layers.

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