

- 558 Lung Cancer. Detection by Use of Electrical Skin Resistance Method. J. F. Fries and C. P. Richter. Arch. Internal Med. 113, 624-634 (May, 1964).

In a high proportion of patients with lung tumors, abnormal patterns of high and low electrical skin resistance are reported. Many of these patterns are due to lesions of the sympathetic ganglia in the cervical and upper thoracic regions, either from pressure or from invasion. A concept of a broader and often subclinical Horner's syndrome, detectable only by measurements of skin resistance is set forth. Other abnormal patterns of skin resistance associated with lung tumors are thought to be due to sympathetic hyperactivity referred to the dermatomes representing the lungs and bronchi. Others are due to peripheral nerve lesions, such as involvement of the intercostal nerves by tumor. Still other bizarre patterns are at present unexplainable and nonspecific. Further experience with the method, however, may delineate them into specific syndromes. Possible practical applications of the method in diagnosis are discussed. Advantages cited include speed, cost, paucity of false positives, superiority with certain tumor types, and lack of discomfort to the patient.

-- Am. Rev. Resp. Dis. Abstr.

- 559 Treatment of Pulmonary Aspergilloma with Amphotericin B. H. Ikemoto. Arch. Internal Med. 115, 598-601 (May, 1965).

Isolated therapeutic successes in the treatment of bronchopulmonary aspergillosis have been reported following the administration of nystatin by aerosol as well as oral intake of large doses of potassium iodide. Parenteral injection of stilbamidine and, more recently, amphotericin B have also been considered to be successful in isolated cases. However, clinical effectiveness against deep-seated fungous diseases has been accompanied by a variety of disturbing side effects and evidence of toxicity during intravenous infusion of the drug. Fatal reactions due to renal or hepatic failure and drug hypersensitivity have also been recorded in the human. Furthermore, systemic drug therapy appears to have particularly limited value in the treatment of free-lying Aspergillus fungus ball. There is only one preliminary report of endobronchial use of amphotericin B in the English literature. In this report, amphotericin B was instilled intrabronchially by tracheal puncture in one patient with pulmonary aspergilloma. The instillation of the drug was associated with expectoration of many fragments of fungus ball. Subsequently, the fungus ball disappeared almost completely on the chest roentgenograms. There were no signs of side-effects or evidence of renal or hepatic toxicity during the treatment period.

- 560 Pulmonary Aspergillosis: Diagnostic and Immunological Significance of Antigens and C-Substance in Aspergillus Fumigatus. J. L. Longbottom and J. Pepys. J. Pathol. Bacteriol. 88, 141-151 (July, 1964).

Extracts were prepared from supernatant fluids of broth cultures of A. fumigatus and other fungi. The number and types of antigens formed varied considerably with the kind of culture medium employed and the time of harvesting. Maximum antigen production by A. fumigatus occurred after three to five days of incubation in Sabouraud's medium. Of 307 patients with asthma, the sera of 9% had precipitating anti-fungal antibodies; 63% of patients with asthma, transitory pulmonary infiltrations, and eosinophilia gave positive reactions; and 98% of 57 patients with pulmonary mycetomata gave strongly positive precipitation reactions. Moreover, the sera of patients in the latter group produced many more precipitin arcs in gel diffusion than the other sera. Normal sera did not contain precipitating antibodies. The incidence of positive skin tests paralleled the occurrence of precipitins. Following surgical removal of the mycetomata, the precipitins tended to disappear. It was also found that after prolonged culture of A. fumigatus an antigen is produced which is serologically related to pneumococcal C-substance.

-- Cond. from Am. Rev. Resp. Dis. Abstr.