

## Proceedings of the Thoracic Society

The Spring Meeting of the Thoracic Society was held on 7 and 8 March 1969 at the Royal College of Physicians, London. There were 17 short papers, one symposium, and one lecture. Summaries follow.

### ALLERGIC DISEASE OF THE BRONCHI

J. PEPYS, H. O. J. COLLIER, N. B. PRIDE, and R. E. C. ALTOUNYAN There have been considerable advances in recent years in the understanding of the nature of allergic reactions occurring in the lungs and the many ways in which these reactions present in clinical practice. This symposium is aimed at considering the mechanisms and clinical implications of these allergic reactions, with particular reference to their importance in disorders of the bronchi.

First, the nature and mechanism of allergic reaction in pulmonary disease are considered. The chemical mediators of some of the responses to these allergic reactions and the effects of administration of specific antagonists to these substances are then reviewed.

Recent studies have demonstrated that one of the most important reactions, airways obstruction, cannot be explained simply as broncho-constriction; current views are presented together with their relevance to the limitations of spirometric methods of assessing changes in airways obstruction.

Finally, practical aspects of the identification of patients in whom an allergic reaction is causing, or is contributing to, their bronchial disorders, and the assessment of its importance in individual patients are considered.

### THE RELATIONSHIP BETWEEN ATRIAL AND VENTRICULAR RATES IN PATIENTS WITH COMPLETE HEART BLOCK

T. J. BAYLEY and K. D. LEE The atrial rate was measured at various pacemake ventricular rates in patients with complete heart block. The atrial rate was measured from the interval between P waves (P-P intervals) in the electrocardiogram and the ventricular rate from the interval between pacemake ventricular complexes (R-R interval).

When the ventricular rate was increased there was a slowing of the atria over the range of pacemaker rates from 25 to 90/minute. There was an inverse relationship between P-P and R-R intervals which was linear over this range.

After intravenous atropine (0.6 mg.) there was some alteration of the relationship between P-P and R-R intervals. A larger dose of atropine (1.2 mg.) abolished the slowing of the atrial rate with increase in the ventricular rate.

The P-P interval was also measured during ventricular standstill. There was initially a lengthening of the P-P

interval followed by progressive shortening, reaching a plateau after 12-14 seconds of ventricular asystole. When ventricular systole was re-established there was a gradual slowing of the atrial rate to the pre-standstill level. After intravenous atropine (1.2 mg.) there was no atrial quickening during ventricular standstill nor was there slowing with ventricular systole. The atrial response to ventricular asystole was not modified by the interposition of up to three pacemake ventricular beats.

### COMPARATIVE TRIAL OF SURGERY AND RADIOTHERAPY FOR OAT-CELL CARCINOMA OF THE BRONCHUS: FIVE-YEAR RESULTS

A. B. MILLER The patients admitted to this trial were clinically operable, fit for resection or radical radiotherapy, and had had a diagnosis of small- or oat-celled carcinoma made as a result of a biopsy obtained at bronchoscopy. They were allocated at random to a policy of treatment by surgery or a policy of treatment by radical radiotherapy.

Of 71 patients admitted to the surgery series, three (4%) were alive at two years and one (1%) at five years. The survivor was a patient who, although fit for surgery when admitted to the trial, became too breathless to withstand a resection before operation could be performed and was therefore treated with radiotherapy. In comparison, of 73 patients admitted to the radical radiotherapy series, seven (10%) were alive at two years and three (4%) at five years. All three survivors in the radiotherapy series received radical radiotherapy. These differences do not attain statistical significance, but the mean survival for the patients in the radiotherapy series was significantly longer than that for the surgery series.

The implications of these findings are discussed.

### HIGH DOSE NITROGEN MUSTARD THERAPY FOR BRONCHIAL CARCINOMA

JOHN MANNIS The results are presented of single high-dose intra-atrial nitrogen mustard used to treat 10 patients with bronchial carcinoma who presented with superior vena caval obstruction. The relative ineffectiveness of conventional nitrogen mustard therapy could be due to inadequate, local concentration as a consequence of low dosage and the rapid decay rate of the drug.

A catheter was introduced into the right atrium via the femoral vein. A single dose of nitrogen mustard,