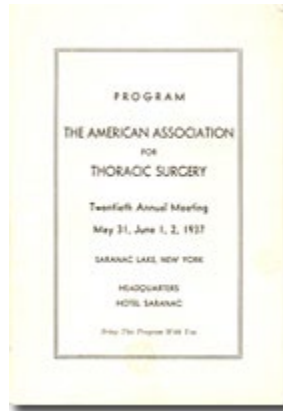


## 1937 ANNUAL MEETING PROGRAM



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## ANNUAL MEETING PROGRAM

All meetings will be held in the Town Hall

9:00 a.m. Business Meeting

9:30 a.m. Scientific Session

1. Bronchoscopic Aid in the Management of Postoperative Pulmonary Complications.

GABRIEL TUCKER, Philadelphia, Pa.

The value of direct inspection of the interior of the tracheobronchial tree and the mechanical aid afforded in the removal of obstruction to ventilation and drainage by means of the bronchoscope are very well known to the thoracic surgeon. The use of the bronchoscope in the diagnosis and treatment of postoperative pulmonary complications has been applied over a sufficiently long period and to a large enough number of cases to establish at least to some degree its value. Observations in a series of over 150 cases of postoperative pulmonary complications in which bronchoscopy was used as a method of diagnosis and treatment will be presented and an effort made to evaluate the aid rendered by bronchoscopy in the end result in the cases. The presentation will be illustrated by lantern slides and a short moving picture film of the special technic used in the critically ill cases particularly of massive obstructive atelectasis.

2. The Treatment of Ruptured Lung Abscess.

FRANK S. DOLLEY, Los Angeles, Calif.

A method of treating massive pneumothorax following sudden rupture of a lung abscess is described. The complete and immediate drainage of the empyema cavity, the simplicity of the operation, and almost total absence of sucking in the thoracostomy wound have given amazingly good results.

3. The Free Transplantation of Fat for the Closure of Pulmonary Cavities.

HAROLD NEUHOF, New York, N. Y.

The pulmonary cavity left behind after the evacuation of a destructive suppurative lesion may range in size from a small defect to a lattice lung occupying much of a lobe. If such cavities, always featured by bronchial fistulae, do not heal spontaneously they present problems for closure which may be simple and easy of solution or difficult and complicated. For the closure of these cavities free transplants of fat have been employed by me. This operation has been performed even though it has been realized that infection still existed in a number of instances, and that the situation in general was far from ideal for the "take" of a graft. Despite the theoretical assumption that failure would follow frequently, the grafts have succeeded in most of the cases. As a result, a problem otherwise difficult of solution has been solved by this exceedingly simple procedure. An outline of the case reports will be given.

4. Chemotherapy in the Treatment of Streptococcus Infections of the Pleura and Chest Wall.

HARRY C. BALLON and ALTON GOLDBLOOM, Montreal.

*(By Invitation)*

Experiences with P-aminophenylsulphonamide (Prontylin) and its derivative (Prontosil) in the treatment of hemolytic streptococcus infections of the lung, pleura and chest wall are presented. These dyes appear to possess definite chemotherapeutic properties in the presence of infection caused by the hemolytic streptococcus. This fact is particularly well illustrated in the case of an unusual and apparently hopeless infection of the pleura, chest wall and ribs complicating scarlet fever.

5. Roelf the Dual Pulmonary Circulation in Various Pathological Conditions of the Lungs; Together with Some Observations on the Sources of Pulmonary Hemorrhage and Attempts at its Control.

D. A. WOOD (*by invitation*) and LEO ELOESSER,

San Francisco.

Short review of previous attempts at study of this problem. Short description of technique. Normal relation between circulation in pulmonary and bronchial arteries. (Greater and lesser pulmonary circulation.)

Pathological relations:

- (a) Due to hypertrophic processes in pulmonary parenchyma.
- (b) Due to obstructive lesions, pulmonary and cardiac, sclerotic, congestive, etc.
- (c) Due to inflammatory lesions, chronic and acute; pulmonary, cardiac, and mixed.
- (d) Due to processes of debatable etiology. Emphysema, asthma, etc.
- (e) Congenital anomalies.

Anomalies of dual circulation as possible etiological factor in various lesions of undetermined etiology, e.g., hypertrophic pulmonary osteo-arthritis.

Sources of pulmonary hemorrhage. Hemorrhage from lesser circulation (pulmonary), arterial and venous.

Hemorrhage from greater circulation (bronchial).

Pulmonary cavity; pulmonary abscess; inflammatory lesions; and Tumors. Ulcerating lymph nodes.

Attempt at control; mass ligation at lobar hilum, compression, local hemostasis VI bronchoscopy.

12:30 p. m. Luncheon. Trudeau Sanatorium.

### **Monday Afternoon, May 31, 1937**

**2:00 p. m. Address by Professor Hans C. Jacobaeus, Stockholm, Sweden. Bronchspirometry and Its Use in Determining Indications for Thoracoplasty in Bilateral Pulmonary Tuberculosis.**

7. The Effect of Thoracoplasty on the Pathological Physiology of Respiration.

WILLIAM S. MCCANN and NOLAN L. KALTREIDER,

Rochester, N. Y.

(*By Invitation*)

Measurements of the total pulmonary capacity and its subdivisions were made in 20 cases of pulmonary tuberculosis treated by thoracoplasty. In addition, roent-genographic studies were made, the gaseous content of the arterial blood was determined, the venous pressure and blood velocity were measured and in six instances the respiratory response during

exercise was obtained. The measurements were made from 7 to 127 months after operation.

It was found that thoracoplasty caused a marked reduction in the total and vital capacities; the diminution being roughly proportional to the number of ribs resected. The reduction in the mid capacity and the residual volume was less marked than in the other capacities, resulting in high normal values for the relative values. The ability to expand the chest in patients with thoracoplasty was greatly diminished. Surgical interference with the chest cage resulted in a slight to moderate anoxic anoxemia. In spite of the presence of arterial anoxemia, no evidence of polycythemia was found. The values for the venous pressure were slightly elevated but were not abnormally high. In about half the patients the velocity of the blood (arm to tongue time) was slightly delayed. During moderate physical exertion patients with thoracoplasty operations had a rapid and shallow type of breathing compared with normal individuals. The expression *total ventilation* was abnormally high and all, but one patient complained of dyspnea on moderate exertion. The pulmonary reserve was reduced in all cases. Definite correlations existed between the degree of disability and the reduction in the vital capacity and the pulmonary reserve and the increase in the expression, *total ventilation*.

#### 8. The Lung Volume After Thoracoplasty.

RICHARD H. OVERHOLT and JOHN S. HARTER, Boston.

*(By Invitation)*

Thoracoplasty results in an irreversible and permanent alteration of the volume of the thorax. The ideal operation should, therefore, be one which adequately collapses lung involved by disease and at the same time not interfere with the function of healthy portions of the lung. Recently reports have appeared in the literature of greatly reduced values in lung volume studies made soon after thoracoplasty. The question has been raised "Can the disease (tuberculosis) be arrested without making the patient worse off physiologically than he was before?"

Lung volume (Christie's method) and vital capacity determinations have been made in a series of 72 thoracoplasty subjects. One-half of this number have now been restudied, six to eighteen months after completion of the operation. All cases selected for review are considered apparently arrested and have either returned to work or are on graduated exercises in the sanatoria. The results show alterations in the lung volume in both directions. Increase in the volume of the lung was found after operation in some, values as high as 24% above there-operative readings. The majority of cases showed a slight decrease in lung volume. The vital capacity in all cases showed a decrease from 8% to 30%. The study suggests that the more nearly the operation approaches the ideal, i.e., selective collapse with preservation of functioning basal portions, the less change in respiratory reserve.

#### 9. Studies and Recent Physiological Tests in Cardio-Respiratory Mechanics.

##### I. Methods for Estimating Pulmonary and Circulatory Capacity.

ADRIAN LAMBERT and *(by invitation)*

DICKINSON W. RICHARDS, J. And ANDRE COURNAND,

New York, N. Y.

Mechanics of breathing were studied by the use of respiratory tracings, lung volume and maximum capacity determinations, as well as by the more common methods of fluoroscopy, x-rays, and external chest measurements. Respiratory gas exchange was

estimated by geometric methods, analysis of expired air, and of the arterial blood gases. Circulatory mechanics were studied by measurement of circulation, time, venous and arterial blood pressures, and by the response of these and of the vital capacity to intravenous saline injection. In order to test the efficiency of breathing, the adequacy of gas exchange, and the circulatory adjustments in changing physiological conditions, these measurements were carried out both at rest, during one minute of moderate exercise, and during the period of recovery from exercise.

## II. Illustrative Cases of Chronic Pulmonary Disease Before and After Chest Surgery.

FRANK BERRY and (*by invitation*)

DICKINSON W. RICHARDS, J. And ANDRE Cournand,

New York, N. Y.

A limited number of diversified cases of chronic pulmonary tuberculosis has been selected to illustrate the use of this method in relation to phrenectomy and thoracoplasty. Preoperative and late postoperative status is discussed from the physiological standpoint.

### 10. A Study of Changes in Cardio-Respiratory Physiology Following Total Pneumonectomy in Young Developing Animals.

B. N. CARTER and J. LONGACRE, Cincinnati.

The anatomic changes in the remaining lung occurring in young developing animals following pneumonectomy have been demonstrated by several workers and these changes have been contrasted with those occurring in adult animals. The purpose of this paper is to determine the degree of compensatory return of function in young pneumonectomized animals and to contrast this degree of return of function with that in adult animals following pneumonectomy.

Aglitter of six puppies were chosen. Three of these animals were pneumonectomized at the age of one month (the entire left lung being removed at this time) and the remaining three animals were kept as controls. Six months after pneumonectomy all the animals were subjected to the following:

#### A. *Strain Experiments*

1. Each animal was run for 2 hours in the treadmill (traversing 4600 meters) and the alteration in pulse, temperature and respiration, and the saturation of arterial bloods were noted.
2. Anoxemia test, as measurement of absolute strain in the oxygen percentage in the inspired air was determined at the critical level (as described in our earlier work).
3. Lung volumes were determined by the method described by Christie.

These observations were repeated at monthly intervals throughout the growth period, and the various physiologic changes noted. These findings were now contrasted with the physiologic changes noted in experiments carried out simultaneously on adult animals. Inasmuch as these strain experiments measure the cardio-respiratory reserve, it is hoped that this work will clearly show the influence of the growth factor on compensatory return of function following total pneumo-nectomy.

## Tuesday Morning, June 1, 1937

9:00 a. m.

### 11. Cine-Fluorographic Studies of Thoracic Diseases.

WILLIAM H. STEWART and (*by invitation*)

F. H. GHISELIN, New York, N. Y.

By cinefluorography is meant the making of a motion picture record of the image seen on the fluoroscopic screen.

The difficulties surrounding this procedure have been greatly lessened by new developments in apparatus recently made available which include a modern lens of the strength of 0.85, a fluoroscopic screen of great intensity and an x-ray tube which will sustain a heavy current of 100 K. V. at 125 milliamperes. All these requisites are subservient to an extremely fast film which has now been obtained.

The advantages of the method are that moving organs may be intensively studied at leisure as long as desired without undue exposure of the patient or the operator to the x-ray. It is relatively inexpensive and uncomplicated and furnishes a good library for teaching purposes. It is especially valuable in all lesions above the diaphragm. Comparative films may be made which can be sent any distance for inspection.

### 12. Carcinoma of the Esophagus: A Report of the Successful Removal in One Case and a Review of the Cases Treated at the University of California Hospital.

HAROLD BRUNN and (*by invitation*)

H. B. STEPHENS, San Francisco.

This paper will include the report of a successful operative recovery of a patient suffering from a moderately advanced carcinoma involving the middle esophagus. The technic of Torek was employed. The value of pre-operative pneumothorax, positive pressure, intratracheal anesthesia and the prevention of a contralateral pneumothorax will be given proper emphasis, as the authors believe attention to these factors will give a greater number of operative recoveries.

The cases treated in the past ten years by the thoracic surgical group at the University of California Hospital will be presented. This review will include the operability of the tumor, reasons for surgical failure, and the various methods employed in the application of radium in those cases considered inoperable.

### 13. The Successful Treatment of Carcinoma of the Esophagus by Means of Surgical Diathermy.

HERMAN J. MOERSCH, Rochester, Minnesota.

A case of squamous-cell carcinoma of the esophagus affecting a man sixty-eight years old is reported. The growth was destroyed by means of surgical diathermy in 1935. The patient is alive and well, with no evidence of local or metastatic recurrence of the growth. He is able to eat everything without difficulty and has gained 21 pounds.

### 14. The Management of Teratoid Tumors of the Chest.

STUART W. HARRINGTON, Rochester, Minnesota.

Moving picture demonstration.

15. The Augmentation of Collateral Coronary Circulation by Operation.

C. S. BECK and *(by invitation)*

F. R. MAUTZ and A. R. MORITZ, Cleveland.

In the normal heart abundant anastomoses exist between the major branches of the coronary arteries. There are also communications at the base of the heart between coronary arteries and extra coronary arteries. There is considerable natural variation in the degree of such anastomosis, but functionally the coronary arteries are end arteries.

As a result of chronic progressive obstruction of Coronary arteries, the intercoronary and extracoronary anastomoses enlarge. Symptoms of coronary disease are interpreted as failure of collateral blood supply to compensate for the disease.

The Beck operation is designed to improve the collateral coronary circulation in coronary disease. The mechanisms by which this may occur are:

1. Development of new intercoronary anastomoses to aid in the redistribution of blood in the myocardium.
2. Development of new extracoronary anastomoses to increase the total blood supply of the heart.
3. Increase in caliber of existing intercoronary and extracoronary anastomoses by the hyperemia and tissue reaction.

16. Tuberculous Constrictive Pericarditis. Report of Cases Treated by Pericardiectomy.

ALFRED BLALOCK AND *(by invitation)* SANFORD E. LEVY,

Nashville, Tennessee.

Nineteen patients with chronic constrictive pericarditis have been studied. The disease was believed to be tuberculous in origin in sixteen and was proven to be in thirteen. Pericardiectomy was performed in twelve of the nineteen patients. Of the twelve cases, tuberculosis was proven in eight and was believed to be the etiological agent in another. The indications for operation, the results and the prognosis are considered.

12:30 p. m. Luncheon. Ray Brook Sanatorium.

**Tuesday Afternoon, June 1, 1937**

2:00 p. m. Executive Session.

3:30 p. m. Scientific Session.

Presidential Address.

LEO ELOESSER, San Francisco.

Bronchostenotic Cavities and Other Closed Foci of Tuberculous Suppuration in the Lung.

17. Situs Inversus, Bronchiectasis and Chronic Sinusitis.

RALPH ADAMS *(by invitation)* and EDWARD D. CHURCHILL,

Boston.

Scattered notes in the German literature record the coincidence of bronchiectasis, sinusitis and situs inversus. Six cases of this syndrome are presented. The frequency with which this association occurs in the hospital population is statistically entirely beyond the possibility of mere chance. Embryologic theories as to the cause of situs inversus suggest that the bronchiectasis may be due to associated maldevelopment.

18. An Appraisal of Closed Intrapleural Pneumonolysis in Pulmonary Tuberculosis.

E. C. DRASH, University, VA.

Based on over two hundred personal cases and a survey of the literature with particular respect to the optimum time for operation and choice of patients. Criteria for selection of this procedure, rather than some other type of operation.

Study of several cases of tuberculous empyema. Possible explanation of occurrence of tuberculous empyema in cases in which lung tissue was definitely not injured at the time of operation.

Discussion of other complications & haemorrhage.

19. A Two Stage Operation for Total Pneumonectomy, Demonstrating a New Technique foreclosure of the Bronchus.

WILLIAM F. RIENHOFF, JR., Baltimore, Maryland.

The total removal of the right and left lung in two stages is described together with the new method of closure of the primary bronchi. The technique described permits of removal of the lower end of the trachea as well. Particularly useful in very high growths that otherwise would prove inoperable. Emphasis is placed on dissection of the lymphatic glands.

7:30 p. m. Annual Dinner. Hotel Saranac.

### **Wednesday Morning, June 2, 1937**

9:00 a.m.

20. Sterilization of the Air in the Operative Region with Bactericidal Radiant energy.

DERYL HART, Durham, North Carolina.

This study compares the results obtained in 110 thoracoplasties performed without sterilization of the air in the operative field with over 100 similar operations performed in a field of sterilized air. The comparison covers the number of infections, severity of infections, the postoperative temperature elevation and duration, and the general reaction of the patient.

21. Experience with Collapse Therapy for Pulmonary Tuberculosis in the Fifth and Sixth Decades.

H. R. DECKER, Pittsburgh, PA.

The paper is based on the experience of treating cases by means of artificial pneumothorax, thoracoplasty, phrenic nerve operations, and extrapleural pneumolysis. Some 200 patients in the fifth and sixth decades have been so treated.

22. Partial Thoracoplasty for Pulmonary Tuberculosis: With a Suggested Plan of Operation including Preliminary Anterior Chondrectomy, Together with a Review of Results.

OWEN H. WANGENSTEEN and HERBERT A. CARLSON,

Minneapolis, Minnesota.

The important lesion in tuberculosis necessitating the performance of compression-types of operation is almost invariably in the upper lobe. The operative attack of the surgeon should be directed upon the dome of the bony cage of the chest wall.



In the first stage in the operative procedure, the writer, remove the costal cartilages of the upper four ribs. Ten days later, usually complete removal of the upper three ribs is done. The previous excision of the upper costal cartilages facilitates considerably complete rib removal from behind. Since Semb described extra fascial apicolysis, this procedure is also done at the time of the first posterior operation in suitable cases. Again, two to three weeks later, complete excision of the fourth and subtotal removal of the fifth and sixth ribs are done.

This type of operation is apparently much more readily borne by the patient than the complete thoracoplasty and the operative collapse more effectual than in the usual Wilms-Sauerbruch or Brauer thoracoplasty. The experiences of the writers with the method will be reported together with a resume of the results obtained.

23. Management of the Excessively Mobile Mediastinum in the Surgical Collapse of Tuberculosis Pulmonary Cavities.

B. P. POTTER, Secaucus, N. J.

The paper deals with a study of 60 cases in which the mediastinum was fixed by artificial methods either during the course of pneumothorax or prior to thoracoplasty. The studies have been conducted for the past 5 years and there has been a follow-up on from 2 to 5 years.

24. Studies of Tuberculous Empyemata Based on 150 Personal Cases.

POL N. CORYLLOS, New York, N.Y.

25. The Effect of Phrenic Nerve Interruption on the Gastro-Intestinal Tract.

FRED R. HARPER, Tucson, Arizona.

*(By Invitation)*

Following phrenic nerve interruption, gastro-intestinal disturbances of varying degree occur in a high percentage of cases. The syndrome following paralysis of the left hemidiaphragm is characterized by loss of appetite, feeling of fullness, nausea, and vomiting. The syndrome following paralysis of the right hemidiaphragm differs in that it is characterized primarily by pain in the right upper quadrant. Roentgenograms taken before and after phrenic interruption show anatomical changes in the abdominal viscera of sufficient degree to explain the symptoms. Temporary phrenic interruption is advised in preference to permanent phrenic exegesis because in all of the observed cases the symptoms did not persist after the function of the diaphragm returned. If the possibility of gastro-intestinal symptoms following phrenic nerve interruption is kept in mind, unnecessary concern over the patient's condition, and even useless operations, may be avoided.

12:30 p.m. Luncheon. N. V. A. Sanatorium.

2:00 p. m. Townhall. Presentations by Physicians of Saranac Lake.

A Review of the Results of the Treatment of Tuberculous Empyema.

W. W. WOODRUFF.

The Virulence of the Tubercle Bacillus Destroyed by the Action of the B. Macerans and the L. Pentoaceticus.

H. A. BRAY. JOSEPHKURUNG.

The Importance of Determining the Vitamin C Content in Fruits and Vegetables in the Treatment of Intestinal Tuberculosis.

MACK MCCONKEY.

The Lymphatics of the Pleura in Relation to Cold Abscesses of the Chest Wall.

HUGH E. BURKE.

Immediate and late results of Hygienic-Dietetic Treatment of Pulmonary Tuberculosis.

HOMER L. SAMPSON. FRED H. HEISE.

Venous Pressure in Collapse Therapy and other Complications of Pulmonary Tuberculosis.

JOHN STEIDL.

1. Functional Rest in Pulmonary Tuberculosis Attained by Temporary Elimination of Intercostal Nerves.

FRANZ TOREK, Montclair, N. J.

2. Actinomycosis of the Chest: Report of Two Cured Cases.

DEWEY BISCARD, Omaha, Nebraska.

3. Selective Thoracoplasty for Persistent Basal Tuberculous Cavities.

SAMUEL O. FREEDLANDER, Cleveland, Ohio.

4. Tuberculosis of the Intercostal Glands.

WILLARD VAN HAZEL, Chicago, Illinois.

5. The Non-Surgical Treatment of Tuberculous Empyema.

DEAN B. COLE and WALTER N. NALLS, Richmond, Va.  
(By Invitation)

6. Pulmonary Abscess Following Prostatic Massage.

SIDNEY SHIPMAN and FRANK UNDERWOOD, San Francisco.  
(By Invitation)

7. Bronchial Obstruction Produced by Organic and Inorganic Foreign Bodies.

JOSEPH WEINBERG, Omaha, Nebraska.

8. Rhinoscleroma as a Cause of Laryngo-Tracheal Stenosis.

W. L. ROGERS, San Francisco, California.

9. Our Experiences in the Employment of Spinal Anesthesia for Thoracoplasty.

ERASER B. GURD and (by invitation)  
A. M. VINEBERG,  
WESLEY BOURNE, Montreal.  
(By Invitation)

10. Subperiosteal Resection of the Manubrium for Funnel Chest.

PHILEMON E. TRUESDALE, Fall River, Mass.

11. Roentgen Therapy for Bronchiectasis.

MAURICE BERCK, New York, N. Y.

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