Staff Meeting Bulletin
Hospitals of the » » »
University of Minnesota

Bronchiectasis

Volume XIII | Friday, October 24, 1941 | Number 4

STAFF MEETING BULLETIN
HOSPITALS OF THE . . .
UNIVERSITY OF MINNESOTA

Vol. XIII | Friday, October 24, 1941 | Number 4

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Published for the General Staff Meeting each week
during the school year, October to June, inclusive.

Financed by the Citizens Aid Society,
Alumni and Friends.

William A. O'Brien, M.D.

I. LAST WEEK

Date: October 17, 1941

Place: Recreation Room
Powell Hall

Time: 12:15 to 1:20 P.M.

Program: "Megacolon"
Robert Alway

Discussion
Leo G. Rigler
Irvine McQuarrie
Aaron Friedell
William T. Peyton
Eric Clarke
Robert E. Harris
Robert Alway

Present: 169

Gertrude Gunn,
Record Librarian

- - - -

II. OFFICES

MARCUS H. RABWIN, M.D.

Announces the removal of his offices
to 9730 Wilshire Boulevard
Wilshire at Linden
Beverly Hills, California

Crestview 1-2177
Day and Night

Surgery and Gynecology

- - - -

III. BABIES

Schuyler Pillsbury Brown, weight 9 pounds 2 ounces, first born of Schuyler Brown and Arnetta Becker Brown. Arrived Saturday, October 18, 10:51 A.M.

Congratulations!

IV. MEETINGS

1. MINNESOTA MEDICAL ALUMNI ASSOCIATION

Announces its

ANNUAL CLINICAL PROGRAM AND MEETING

Friday, October 31, 1941, (the day before Homecoming). To be held in the University Hospitals as in previous years

Wesley W. Spink: "Sulfonamide Therapy"
Larry Boies: "Hearing Loss in Childhood"
*Lloyd H. Ziegler, Milwaukee: "Reactions of Psychotic Individuals to Surgery"
*Harry Christianson: "Ano-rectal Diseases"
Miland Knapp: "Physical Therapy of Fractures"
*Erling Platou: "Human Serum Therapy"

A short business meeting will immediately follow the Clinical Program.

Luncheon will be served in the Coffman Memorial Union at 12:30 p.m. This luncheon meeting will be addressed by Dr. Wallace H. Cole on his "Recent Experiences in England."

All Alumni of the University of Minnesota Medical School and other interested physicians are invited to attend.

*Member of 1921 class.

2. CENTER FOR CONTINUATION STUDY

Medicine

Radiology of Chest - November 3-5
Sulfonamide Therapy - November 10-12
Urology - - - - - - - November 10-12
Diseases of Infancy and Childhood - - - December 15-20

Hospital

Occupational Therapy - November 17-19
Medical Social Service - November 24-26

Public Health

Public Health Nursing - November 6-8

3. ANATOMY SEMINAR

Room 226, Institute of Anatomy, Saturday, October 25, 11:30 p.m.

Hal Downey: The Origin of Plasma Cells.

Robert A. Huseby: Absence of the Hepatic Portion of the Inferior Vena Cava with Bilateral Retention of the Supracardinal System. Visitors Welcome.

4. MINNESOTA MEDICAL FOUNDATION

The Minnesota Medical Foundation second annual meeting will be held in the Campus Club dining room, Coffman Memorial Union, Friday, November 7, 6:30 P.M. Dinner $1.00 a plate. Annual business meeting, special guest speaker, Dr. Morris Fishbein, editor Journal of the American Medical Association. Please make reservations with Dean Diehl's office. Members and all interested physicians are cordially invited to attend.

5. PATHOLOGY SEMINAR

Room 104 Institute of Anatomy, Monday, October 27, 1941, 12:30 p.m.
Subcutaneous Lymph Nodules Induced by Hypersensitiveness to Foods.
Dr. E. M. Schleicher. Visitors welcome.

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V. WE WELCOME THE FOLLOWING

Thank you for your support.

Arkansas
- Ulferts, Ulfert, Hot Springs

Florida
- Ravitch, Samuel J., Quincy

Illinois
- Moore Clinical Laboratory, Chicago
- McMillan, James T., Chicago

Indiana
- South Bend Medical Laboratory, South Bend

Kansas
- Hanson, J. W., Manhattan

Louisiana
- Hebert, Warren, New Orleans

California
- Kahn, Maurice, Los Angeles

Michigan
- Knudson A.B.C., Fort Custer

Minnesota
- Swift County Hospital, Benson
- Bray, R.B., Biwabik
- Thorvatson, Percy, Cass Lake
- Smith, B.A., Crosby
- St. Louis County Medical Society Library, Duluth
- Moran, Harold H., Hastings

Minneapolis
- Anderson, Karl
- Benjamin, A.E.
- Christianson, H.W.
- Friedell, Aaron
- Lang, Leonard
- Schaaf, F. K.
- Shapiro, M.J.
- Webb, R. C.
- Winer, Louis P.

Emerson, Edwin, Proctor

St. Paul
- Ide, A. W.
- Borg, Joseph F.
- Briggs, John F.
- Donohue, Philip
- Leavenworth, R. O.
- Pearson, Malcolm M.
- Ritchie, Wallace F.

Mississippi

Biloxi
- Del Toro, L. C.
- Fogel, Morris
- Rothman, J.
- Sawyer, James G.
- Taterka, A.

Montana
- Anderson, Gordon, Deer Lodge
- Griffin, L. G., Kalispell

North Dakota
- St. Alexius Hospital, Bismarck
- Lancaster, W.E.G., Fargo

Texas
- Singleton, A. O., Galveston

Hawaii
- Kometani, John T., Honolulu

Alaska
- Flora, Le Roy W., Palmer

VI. CONTINUATION COURSE IN RADIOLOGY OF THE CHEST   November 3, 4, 5, 1941

Monday, November 3

8:30-12:00 Orientation
- Center for Continuation Study Program . . . . Mr. Nolte
- Continuation Course in Radiology of Chest . . . . Drs. O'Brien and Rigler
- Technical Factors in Photofluorography . . . . Mr. Warren
- Interpretation of 4 x 5 inch Photofluorographic Films . . . . Dr. Birkelo
- Theory and Practical Application of Body Section Roentgenography . . Dr. Scott

1:30-6:00
- Value of Photofluorography in Diseases of Lungs . . . . Dr. Birkelo
- Physiologic Movements of Respiration as Recorded by Roentgenkymographic Studies . . . . Dr. Scott
- Interpretation of 35 mm. Photofluorographic Films . . . . Dr. Hodges
- Tea
- Round Table:- Photofluorography . . . . . Drs. Birkelo and Hodges, Mr. Warren

6:00 Group Dinner

7:30-9:30
- Differential Diagnosis of Chest Conditions . . . . .Dr. Birkelo
- Body Section Roentgenography in Diagnosis of Chest Conditions . . . Dr. Scott

Tuesday, November 4

8:30-12:00
- Technical Factors in Roentgen Examination of Chest . . . . Mr. Warren
- Practical Application of 35 mm. Photofluorography . . . . Dr. Hodges
- Advantages of Standard Stereoscopic Examination of Lungs with 14 x 17 Films . . . . Dr. Kirklin

1:30-6:00
- Comparative Studies of 35 mm. Film, 4 x 5 in. Film, X-ray paper, and Single 14 x 17 Film in Chest Survey Work . . . . .Mr. Warren
- Bronchography--Methods of Examination . . . . Dr. Hodges
- Value of Bronchography in Diagnosis of Broncho-Pulmonary Diseases Dr. Rigler
- Tea
- Diagnostic Conference: Chest Diseases...Drs. Morse, Hodges, Kirklin and Rigler

Wednesday, November 5

8:30-12:00
- Technic of Fluoroscopic Examination of Chest . . . . . . Dr. Rigler
- Practical Application of Bronchography in Chest Lesions . . . . . Dr. Hodges
- Lateral and Oblique Views of the Chest and Their Application . . . . Dr. Good
- Value of Routine Fluoroscopy of the Chest . . . . Dr. Rigler

1:30-5:00
- Routine Examination of Chest in the Tuberculous Patient . . . . . Dr. Hanson
- Routine Examination of Chest in the Postoperative Patient . . . . Dr. Hanson
- Clinical-Roentgenologic Dialogue: Chronic Pulmonary Disease . . . . .Dr. Rigler and Associates
- Clinical-Pathologic Roentgenologic Case Conference . . . . Drs. Ude, Good, Hanson, and Higgins

CONTINUATION COURSE IN RADIOLOGY OF THE CHEST

FACULTY

Leo G. Rigler, Professor of Radiology

Carl C. Birkelo, Roentgenologist, Herman Kiefer Hospital, William H. Maybury Sanatorium, Detroit

Clarence A. Good, Jr., Instructor in Radiology, Mayo Foundation

Malcolm B. Hanson, Clinical Instructor in Radiology

George K. Higgins, Clinical Assistant Professor of Pathology

Fred J. Hodges, Professor of Roentgenology, University of Michigan Medical School

Bryl R. Kirklin, Professor of Radiology, Mayo Foundation

Russel W. Morse, Clinical Assistant Professor of Radiology

Wendell G. Scott, Assistant Professor of Roentgenology, Washington University School of Medicine

Walter H. Ude, Clinical Assistant Professor of Radiology

S. Reid Warren, Jr., Assistant Director, Moore School of Engineering X-ray Laboratory, University of Pennsylvania

REGISTRATION

Tuition - $15.00

In view of the timely nature of this subject in both our national public health program and our national defense effort radiologists and physicians who specialize in diseases of the chest are urged to attend. Registrants may bring problem chest films for opinion.

Director, Center for Continuation Study
University of Minnesota
Minneapolis, Minnesota

VII. BRONCHIECTASIS

John R. Paine and
King A. A. Merendino

Cayol, in 1808, directed Laennec's attention to dilations of the bronchi and bronchioles in the lungs of certain patients with pulmonary disease. In 1819 Laennec segregated these patients from others with disease of the lungs and described the clinical entity of bronchiectasis. Although the name itself means merely a dilated bronchus, chronic infection together with increased secretion of mucus from the bronchial epithelium are so universally present that they must be considered an integral part of the clinical picture. The degree of infection present and the amount of secretion vary a great deal from time to time and from patient to patient. According to the form of the dilations, four types of bronchiectasis are recognized as follows:

Saccular
Cylindrical
Fusiform
Varicose

Etiology

Despite considerable investigation and much speculation the fundamental cause of the bronchial dilation remains unknown. Among the many theories which have been advanced to explain this aspect of the disease the following have received considerable notice.

Mechanical pressure of stagnant bronchial secretions (Laennec)
Nutritional changes in the bronchial walls (Andral)
Effect of forced inspirations (Raymond)
Derangement of the neuromuscular mechanism of the bronchial walls (Stokes)
Increase of the fibrous tissue of the pulmonary parenchyma (Corrigan)
Congenital deformity of bronchi (Miller)

Duken and Van den Steinen have pointed out that the left lung is more frequently involved than the right. This, they think, is explained by the fact that the left main bronchus is smaller than the right and that the drainage of secretions from the left lung is relatively less efficient than from the right due to angulation of the left main bronchus with the trachea. Moreover it is noted that the left main bronchus is somewhat constricted by the pulmonary artery as it crosses it.

Whatever the fundamental cause of bronchiectasis may be it is definitely recognized that the precipitating factor is not always the same. Certain cases follow the aspiration of a foreign body or infectious material from the stomach or upper respiratory tract, others occur as a sequel to pneumonitis and still others develop as gradual accompaniments of repeated acute upper respiratory tract infections. In a few mild cases bronchitis first becomes evident in late life and no satisfactory precipitating factor can be found.

Incidence

Men and women seem to be affected equally by this disease. The incidence of onset is highest during the third decade. In a series of 149 cases reported from Barnes Hospital about 55% of patients had only one lung involved. In 45% of patients, therefore, the disease is bilateral. The lower lobes are more frequently involved than the upper lobes. In the unilateral cases the left lung is involved more frequently than the right. Churchill in recent years has emphasized the fact that the lower portion of the left upper lobe (the lingula) is involved in about 80% of patients in whom disease is present in the left lower lobe of sufficient degree to warrant lobectomy.

Symptoms and Diagnosis

Typically the patient with bronchiectasis complains of cough, the expectoration of a variable amount of sputum which is frequently fetid in character and occasional hemoptysis. It should be noted that hemoptysis is said to be more frequent in bronchiectasis than in pulmonary tuberculosis. Recurrent febrile attacks with pneumonitis in the adjacent pulmonary parenchyma are the rule. At these times the symptoms of bronchiectasis are aggravated. The clinical history at best however is only suggestive.

Nor can a definite diagnosis be established in most cases on the basis of the physical signs. Clubbing of the fingers will be found in the majority of all well established cases and rales can be detected by auscultation over the involved part of the lung. Other chest findings suggest areas of atelectasis and cavitation.

Proof of the existence of bronchiectasis rests on the demonstration of the dilated bronchi on a roentgenogram after the intra-bronchial injection of lipiodol.

Treatment

The failure of conservative procedures to cure or effect a lasting remission of symptoms in any appreciable proportion of cases has resulted in the ever increasing use of lobectomy as the methods of choice in the treatment of bronchiectasis. The non-operative procedures which have some value are as follows:

1. Rest: Rest in bed in most instances causes an amelioration of symptoms but only as long as this form of treatment is persisted in.

2. Postural drainage: This method of treatment is probably more widely used than any other due to the consistent temporary improvement which it produces and the simplicity of the procedure. The assumption of a position in which the head and shoulders are lower than the chest allows gravity to empty most of the dilated bronchi. Those cases with involvement of the upper lobes receive less benefit from postural drainage due to the inclination of the upper lobe bronchi.

   If the head down position of postural drainage could be maintained all the time there would probably be little need for other therapeutic measures. This being impossible, only temporary benefit can be expected. However this temporary improvement is sufficient to enable many patients to get along fairly satisfactorily for a relatively long time.

3. Iodized oil: The installation of iodized oil at intervals of 1 to 3 weeks in some cases appears to decrease the amount of sputum and cause a feeling of well being in the patient so treated. No satisfactory explanation has been found for these beneficial effects. Ballon feels that the only effect is that the oil displaces a certain amount of the sputum and may decrease the absorption of toxic products from the bronchi.

4. Bronchoscopy: Bronchoscopy has come to play an important part in the management of bronchiectasis. By its use the presence of a foreign body, a new growth or a bronchial stenosis can be determined. Those major bronchi from which pus is discharged can be observed and lipiodol can be injected into the desired lobe for roentgenologic examination.

   Jackson and his colleagues at Philadelphia have reported beneficial effects following the repeated aspiration of pus from the bronchi through the bronchoscope. Such a procedure like postural drainage has only a temporary effect which in most cases is not sufficient to make the procedure worthwhile.

5. Roentgen therapy: Certain writers have recommended moderate doses of deep x-ray radiation to the lungs of patients with bronchiectasis. In 1937 Berck and Harris reported that 45% of 40 cases with suppurative bronchiectasis so treated were greatly improved. Seventeen and a half per cent showed no improvement. In their opinion the results obtained in many cases approached almost complete cessation of symptoms. The means by which x-ray radiation affects bronchiectasis is not known. Other investigators have been unable to substantiate the claims of Berck and Harris and the method has never been widely used.

Surgical Treatment

The surgical treatment of bronchiectasis after two decades of clinical trial has become fairly well standardized. Various procedures such as paralysis of the phrenic nerve, pneumothorax, thoracoplasty in its various forms and pneumonotomy have been tried and found wanting.

In 1915 Lilienthal undertook the radical removal of lobes of the lung for suppurative disease. The mortality attending these early efforts was very high. More than one surgeon interested in pulmonary disease and influenced by Lilienthal's work attempted lobectomy but became discouraged by the results. As a consequence interest shifted to the possibilities of various compressive measures. Pneumothorax and thoracoplasty were tried. Hedblom at one time was most enthusiastic over the benefits to be obtained following thoracoplasty in patients with bronchiectasis. Other surgeons were unable to duplicate Hedblom's results however and it became generally recognized that thoracoplasty was not a satisfactory operation. In the early twenties Evarts Graham developed the procedures known as cautery pneumonotomy and cautery pneumonectomy. In these operations the actual cautery was used to establish drainage in the lung with bronchiectasis or to actually remove a portion of it by repeated cauterizations.

In 1929, a report by Harold Brunn formulated the surgical principles by which a one stage lobectomy should be performed. These principles form the basis of the modern operation. Shenstone later added the use of the lung tourniquet. At the present time work being done in both Graham's and Churchill's clinics may lead to the use of a technic by which the hilar structures are ligated separately.

Operation

Today the procedure of choice is the one stage lobectomy with intratracheal anesthesia. Each year the general mortality of this operation as performed throughout the country decreases so that at present it carries no greater risk in capable hands than abdominal operations of comparable magnitude. Among the increasing number of general surgeons with a keen interest in thoracic surgery, Churchill has been preeminent in showing that selected patients can be permanently cured of their bronchiectasis at a risk of less than 3%.

Dolley and Jones in 1939 collected the reports of all lobectomies performed for bronchiectasis which could be found in the literature at that time. Multiple stage operations as well as one stage operations were included. These cases numbered 549, and had a combined mortality rate of slightly over 23%. The mortality rate of those cases operated upon prior to 1929 was nearly 60%. Since 1929 the general mortality rate has been 18%. Since 1936 individual series have shown results even better, i.e.:

		%
Churchill	38 patients	2.6 mortality
O'Brien	15 patients	6.6 mortality
Overholt	17 patients	6.0 mortality
Dolley & Jones	17 patients	11.8 mortality

The most remarkable results are those of Churchill who in 1940 reported his results for the preceding 10 years. 133 pulmonary resections (lobectomies and pneumonectomies) were performed with only 4 deaths, a mortality rate of 3.0%.

Churchill's Results Following Pulmonary Resections for Bronchiectasis (10 yr. period)

	Number	Hospital Deaths	%
A. Lobectomy			
Unilateral	112	2	
Bilateral (6 cases)	12	1	
	124	3	2.4
B. Total Pneumonectomy			
Single stage	7	1	
Lobar stages	2	0	
	9	1	11.1
All resections	133	4	3.0

Study of Patients with Bronchiectasis Treated at the University of Minnesota Hospitals Between June 1, 1938 and June 1, 1941.

For the purposes of this report all the

patients hospitalized between June 1, 1938 and June 1, 1941 on whom a diagnosis of bronchiectasis was made were studied. No cases prior to June 1, 1938 are included because at that time the surgical technic incident to the operations of lobectomy and pneumonectomy became standardized in this clinic. Prior to June 1938 the cautery lobectomy of Graham had been used in a few cases and also the two stage lobectomy in a few instances. The surgical experience with bronchiectasis was not large in this hospital prior to the period covered by this study.

Cases treated more recently than June 1, 1941 are not included because their charts are not yet available in the cross index of the Record Room. A few cases have been excluded from the study due to the fact that bronchiectasis although suspected was not demonstrated by a bronchogram. In these patients the history and physical findings seemed to leave a reasonable doubt that bronchiectasis was present.

Total number of cases studied	41
Diagnosis proved by bronchogram or postmortem findings	33
Diagnosis deemed to be reasonably certain on basis of history and physical examination	8

Treatment by Conservative Measures

Cases treated by conservative measures	32
Cases treated symptomatically	10
Cases treated by the repeated instillation of iodized oil	6
Cases treated by x-ray radiation	9
Cases treated by systematic postural drainage	12
Cases treated by miscellaneous methods	2

Immediate Results of Conservative Measures of Treatment

Symptomatic Treatment: As might be anticipated the patients in this group were individuals in which bronchiectasis was not severe. Their symptoms and the disability ensuing from their disease were minimal. Treatment in general has been the use of medication to relieve cough and measures to prevent as much as possible acute upper respiratory infections. Some temporary relief has been afforded but in general the condition of the patient has remained the same.

Instillation of iodized oil: Of the 6 patients treated in this manner, 2 appear to have been improved during the course of the treatment and for some time afterwards. Four patients have been unimproved. In a few cases bronchograms were made both before and after the iodized oil injections. These showed no change incident to the treatment.

X-ray Radiation: Since 1936 x-ray therapy department has treated 24 patients with bronchiectasis by means of x-ray radiation. Dr. Fink has studied these patients and believes a varying degree of improvement has been obtained in half of them. Nine of these patients are included in the present study. One of these patients appears to have been made definitely worse by the treatment, 4 have been somewhat improved as far as their symptoms are concerned and 4 have been unimproved.

Postural Drainage: A program of postural drainage as recommended for 12 patients has in the main accomplished the end desired. No permanent effect has been noted but most of these patients have coughed less between the periods of drainage and have felt better.

Miscellaneous Therapy: One patient on the Pediatric service was given sulphanilamide by mouth for a period of several weeks without apparent improvement. Another patient in which pulmonary tuberculosis was also found to be present and apparently not associated with the bronchiectasis submitted to thoracoplasty without improvement in the symptoms of his bronchiectasis.

Mortality: Since last seen at this hospital 2 patients of age 17 and 14 years respectively have died. Both of these patients received x-ray therapy. The cause of death is not known. Four other patients in whom no particular therapeutic regimen was followed have died. The cause of death in these patients was as follows:

Age 22, died of multiple lung abscesses and pneumonia.

Age 53, died of cardiac decompensation and pneumonia.

Age 55, died of syphilitic heart disease complicated by an aortic aneurysm. This lesion by compressing the bronchus was thought to have been responsible for the bronchiectasis.

Age 69, died of cardiac decompensation.

Follow-Up Study of Patients Treated by Conservative Measures

In order to obtain information relative to the present condition of the patients studied questionnaires were sent out 2 weeks ago with self-addressed envelopes. The response to these queries has been disappointing.

Of the 10 patients who were treated symptomatically only 3 replied. One of these, an 80 year old man, is satisfied with his condition and seems to be getting along satisfactorily. The other 2 patients are unimproved and are chronic invalids. Three other patients in this group have died from causes directly related to their bronchiectasis.

Of 6 patients treated by the repeated installation of iodized oil 3 replied. One appears to be improved, 1 is worse and 1 is about the same.

Of the 9 patients treated by deep x-ray radiation only 1 replied. This patient's condition remains unchanged. As mentioned previously 2 of these patients have died since receiving treatment.

Of the 12 patients treated by a systematic regime of postural drainage only 2 replied. The condition of both these patients remains the same. One other patient in this group died of right heart failure.

No reply has been received from the two patients treated by thoracoplasty and sulphanilamide respectively.

Treatment by Lobectomy or Pneumonectomy

Cases treated by removal of diseased pulmonary tissue	9
Pneumonectomy	3
Lobectomy	6
One lobe removed	2
Two lobes removed	4

Three of these patients were males aged 17, 19, and 50 years. Six were females **aged** 15, 21, 22, 27, 31, and 51. Symptoms of bronchiectasis had been present at the time of operation for 1/2 to 45 years. The average duration of symptoms was 13 years. The diagnosis of bronchiectasis was demonstrated prior to operation by means of a bronchogram in each instance. All patients were examined by the bronchoscope before coming to surgery. A bronchial stenosis was noted in 2 patients.

All operations were done in one stage. The lobectomies were performed by the use of the lung tourniquet. The pneumonectomies were performed by isolation and individual ligation of the hilar structures. Catheter drainage of the pleural cavity was established at the end of operation in all the lobectomies and in one of the pneumonectomies.

Infection of the pleural cavity of sufficient degree to require rib resection at a later date for drainage occurred in 3 patients. Four patients developed broncho-pleural fistulas. One of these occurred in the operative incision and did not necessitate rib resection.

Of these 9 patients only 1 has died. This patient was a 21 year old unmarried woman. Approximately 10 years before she had been treated at this hospital by phrenectomy and compressive pneumothorax. In 1939 the entire left lung was removed without difficulty. Death occurred on the fourth postoperative day from reflex anuria.

Our experience with lobectomy in the treatment of pulmonary suppuration includes, besides the 9 cases of bronchiectasis discussed above, 4 other patients

in whom infected lung cysts have been removed. None of these patients have died.

The most recent case in which lobectomy has been attempted because of bronchiectasis died during the operation (about 2 weeks ago) from the aspiration of pus into the unaffected lung. This occurred after the chest was opened but before the lung was removed. This case has served to emphasize the importance of adequate preoperative preparation of patients with pulmonary suppuration who are to be operated upon.

Follow-Up Study of Patients Treated by Lobectomy or Pneumonectomy

Seven of the 8 patients surviving operation have replied to our questionnaire. Three of these patients are entirely well and have no sputum. The other patients report themselves improved but not entirely well. Two of these have persistent bronchial fistulas which in all likelihood will require further surgery for a complete cure. The remaining 2 patients have disease remaining in the lower lobe of the unoperated lung. They raise about 1 1/2 ounces of sputum but this is much less than they raised before operation.

Discussion

The results of conservative procedures in the treatment of bronchiectasis are disappointing. The results reported in our own relatively small series bears this fact out as well as the results obtained in larger series in other clinics. Yet up to the present time physicians have been reluctant and rightfully so to recommend so radical a procedure as lobectomy or pneumonectomy to their patients. Surgeons must prove the relative safety as well as the efficacy of any operation to have it accepted by the medical profession as the procedure of choice. In our opinion however the time has come when we should recommend the surgical removal of bronchiectatic lobes more frequently than it appears we are doing.

The authors feel unable to lay down any definite indications for recourse to lobectomy or pneumonectomy in the treatment of bronchiectasis. There is no universal agreement on this point even among the most experienced chest surgeons In many ways we are still in the probing stage in this phase of treatment. Certain it is that many cases in which symptoms are slight can be adequately controlled by postural drainage or symptomatic treatment. Experience has shown that children and young adults withstand major chest surgery better than older people. This fact must be borne in mind in selecting patients for operation. The involvement of more than one lobe and especially the involvement of both lungs may well prevent the use of lobectomy in a patient who would otherwise be a good candidate for the operation. The vital capacity and general health of the patient are also important factors. The principles of technic however have been well established and the way is open by which thousands of patients may be helped to a more comfortable and longer life.

A careful study of the records of the patients included in this study reveals that there are 9 patients who should be considered as possible candidates for lobectomy or pneumonectomy. Operation has already been recommended to 3 of these patients. It is interesting to note that the youngest patient operated upon at this hospital is a 15 year old girl. It is well known that children between the ages of 5 and 15 stand lobectomy at least as well if not better than adults. Three of the 9 patients who in our opinion could be considered as good candidates for operation are between 6 and 11 years of age.

Possible Candidates for Lobectomy or Pneumonectomy

Patient No. 1 - age 6
" " 2 - " 36
" " 3 - " 49
" " 4 - " 11
" " 5 - " 6
" " 6 - " 23
" " 7 - " 24
" " 8 - " 20
" " 9 - " 32

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J.A.M.A. 108:317:1937

5. Dolley, F. S. and Jones, J. S.
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Surgical Principles Underlying One-Stage Lobectomy.
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III. GOSSIP

A letter from Jack Sagel states in part - "since I am unable to come to the fountain head in person, I find the bulletin a good substitute, in keeping in touch with my old friends. We had a little get-together in Chicago last week. Scouts Ward, Harris, and Diese spoke to us. The party was arranged by the Fadell boys (one of the brothers, Maury, lives in Gary). I saw Dr. Rigler and Some of the other radiologists at the American Roentgen Ray Meeting in Cincinnati. Kindest regards to all my friends." Dr. Sagel is practicing radiology in Gary, Indiana. He is a member of the class of 1927 and took his special training in radiology here.

Minnesota will be well represented at the American College of Surgeons Meeting in Boston. Chief Owen H. Wangensteen will tell of "The Cause and Prevention of Stomal Obstruction in Gastrojejunal Anastomoses (Gastric Resection and Gastrojejunostomy)" and John Paine will speak on "End to End Anastomosis of Common Duct for Postoperative Traumatic Stricture." The Surgical Forum will hear from many of our younger men. This new section is designed to encourage young investigators to present their studies (in anticipation of future membership in the American College of Surgeons). The list is impressive. Arnold Kremen - "Studies Relating to the Administration of Bovine Serum and Plasma to Man." Bernard Lannin - "Definition of the Criteria for an Acceptable Operation for Ulcer." N. Kenneth Jensen - "Local Implantation of Sulfanilamide in Contaminated Wounds." Clarence Dennis - "Primary Resection in Strangulation Obstruction." Lyle Hay - "The Production of Acid-Peptic Ulcer in Laboratory Animals by the Muscular Implantation of Histamine in Beeswax." Richard L. Varco "The Value of the Local Implantation of Crystalline Sulfanilamide About Gastro-Intestinal Anastomoses in Dogs."

The Homecoming Program for the ex-pediatric interns and fellows was a great success. Nearly 70 staff members and alumni attended the dinner in the Campus Club dining room on Friday evening. Among others I saw Paul Bancroft and Ray R. Renboldt, Lincoln, Nebraska; Ralph Dyson, Minot, North Dakota; George B. Logan, Rochester; Everett Perlman, now in the army in New York state; John E. Schroepell, Winthrop; Ralph Rosan, Hastings; Nere Sundet, Kadoka, South Dakota; George Kinnell, Interstate Clinic, Red Wing; and Floyd "Pi" Thompson, of Pine Camp, New York, also with the Army Medical Corps. Among former departmental members now in the Twin Cities there was Arthur E. Karlstrom, Director of Health and Hygiene, Minneapolis Public Schools, John M. Adams, newly created Chief of the Pediatric Out-Patient Service, his charming wife Caroline, who is interested in speech disorders; Charlotte Morrison, of Minneapolis; William R. Murlin, of the Division of Social Security, St. Paul, son of the famous investigator who anticipated the discovery of insulin by using

an extract of the pancreas; Harvey Hatch, now on the medical service; Ralph Platou, practicing in Minneapolis with his brother Erland, and many others. Chief Irvine McQuarrie deserves a great deal of credit for starting this admirable custom. I am sure it must have been a matter of great personal pride to see how the group has grown and especially what they have been able to accomplish.

Speaking of crowds, Drs. Wangensteen, Rigler and associates were hosts to an impressive group who stayed over after the meeting of the Interstate Postgraduate Assembly to attend their Saturday morning Clinical Surgical and Radiological Conference. This seminar, held each Saturday morning in Todd Amphitheatre, presents the highlights of the week on the surgical service. Visitors to our institution should be told of this and other interesting sessions which are held each week, as all interested persons are cordially invited to attend.

The second annual meeting of the Minnesota Medical Foundation will be held Friday, Nov. 7 at 6:30 p.m. in the Campus Club dining room (see announcements). All members are urged to be present. Also, any interested physician is invited. Dinner $1.00. Dr. Morris Fishbein, editor of the Journal of the American Medical Association will speak. This is not to be confused with the annual fall meeting of the medical school faculty which will be held on Thursday evening, November 6.

Next week William C. Bernstein ('28) will present a review of polyps of the rectum and colon. Last year in connection with the teaching program of the Center for Continuation Study a special colored movie of Hemorrhoidectomy was made. This was to have been presented next week in connection with the Proctology service program but a previous booking at the American College of Surgeons in Boston will prevent it being shown at that time. Dr. Bernstein, who has been taking graduate work in Proctology, is now in practice in St. Paul and on service in the hospital and out-patient department. Speaking of hemorrhoids, Bill found this in a recent book on Proctology - external hemorrhoids are referred to as eternal hemorrhoids. This would be a typographical error on our service, according to the doctor.

Meet another Minnesota author, Wallace P. Ritchie, Clinical Assistant Professor of Surgery, who has brought forth his first textbook, "Essentials of General Surgery," by Mosby. Three years in the making, it has a foreword by Chief Owen H. Wangensteen and special contributions by C. D. Creevy, George S. Bergh, Edward T. Evans, Stewart Shimonek, Harold Buchstein, Francis Lynch, Charles Craft, John R. Paine and Ralph Knight. It is an impressive volume of 36 chapters, 237 illustrations and 813 pages. Intended as a departmental textbook for students, it's aim is to help them survey the content of general surgery. Recent and remote graduates will find it an excellent source for review of general surgery, and an indication of what Minnesota considers essential in general surgical teaching. Ritchie's "Essentials of General Surgery" will therefore take its place in our departmental textbook series (pathology, radiology, and others).

Minnesota's Medical School has had a unique record in that there has always been a Ritchie on the staff. Wally's grandfather, Parks Ritchie, was our second dean. His father, Harry Ritchie, well known general and plastic surgeon, has only recently retired from active teaching service but is still in practice in St. Paul. Wally is starting out to have one of these old-fashioned families, to create the suspicion that the Ritchie tradition will not be broken. Wallace P. Ritchie was born in St. Paul and went to Blake School. He did his undergraduate work at Yale, his medicine at Johns Hopkins, and his graduate study here. Like our author last week, he too went out for sports as a member of the boxing team at Yale, also as captain. Following graduation, he became well known as a referee for amateur bouts along the eastern seaboard. Like other persons who have learned to protect themselves, Wally is the last fellow that one would ever suspect had had boxing experience. Wally preserves another Ritchie tradition. All have been very well liked and you can go the limit in saying nice things about them......