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Bulletin of the

University of Minnesota Hospitals
and
Minnesota Medical Foundation



Follow-up Study
of Psychiatric Patients

BULLETIN OF THE
UNIVERSITY OF MINNESOTA HOSPITALS
and
MINNESOTA MEDICAL FOUNDATION

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I. FOLLOW-UP STUDY OF PATIENTS ADMITTED TO PSYCHIATRIC SERVICE, UNIVERSITY HOSPITALS, 1938-1944 *

Donald W. Hastings, M. D.
Starke R. Hathaway, Ph.D.
Dorothy M. Bell

A. Introduction

Many follow-up studies have been done during the past fifty years to determine the long term prognosis of patients suffering with mental or emotional disturbances of severe enough order to indicate hospitalization. Such studies, while they have yielded valuable information, are often difficult of interpretation for a number of reasons, the most outstanding of which are:

1. varying criteria of diagnosis from hospital staff to hospital staff. This is a common problem in any medical field wherein the classification system utilized rests upon inexact knowledge of etiology and is particularly true in the field of psychiatry. For example, there may be real disagreement between psychiatrists as to the criteria for the diagnosis of certain forms of schizophrenia (dementia precox). This is a general problem which the present study makes no attempt to meet and one which will remain until such time as a more valid system of psychiatric classification can be developed;
2. follow-up studies have depended often upon questionnaires sent to patient, his family, or to family physician. The questionnaire method is open to serious criticism for a number of reasons in collecting data about psychiatric patients;
3. An almost infinite number of variables exist which may alter the prognosis of a psychiatric illness, and these are extremely difficult to weigh and balance. The type and amount of therapy, fortuitous

circumstances arising after hospitalization, attitudes of family toward the sick person, and ability to gain employment are a few such variables. The upshot of this situation has been that many follow-up studies have utilized the single criterion of the necessity of re-admission to a hospital as the factor of relative illness or relative wellness.

B. Present Study

The present study, while it has some of the previously mentioned defects, was based on the following premises: we will attempt to see what has happened to the people who had been admitted to the psychiatric service during an arbitrary period (1938-1944) by the personal interview method, thereby avoiding the problems created by the questionnaire method. Further, we will try to judge how the person has adjusted from a social standpoint. Thus we were concerned mainly not so much with how many symptoms of one sort or another the person might or might not have, but with how adequately or inadequately the person was able to adjust in his interpersonal relations with family, friends, and community. This seemed to be a much more logical criterion to use in illnesses which characteristically interfere with the interpersonal relations of the patient. If there is anything unique in the present study, it is the utilization of this type of criterion in weighing prognosis.

All of the interviewing was done by one person (Dorothy Bell) who is a social worker specially trained in research method. She traveled many thousands of miles during the summer of 1949, visiting all the counties in Minnesota interviewing patients, their families, and pertinent persons in the community.

*This study was made possible by the Frederick B. Wells, Jr., Trust Fund.

C. Case Material and Method

During the years 1938-1944* inclusive 1638 patients were admitted to the Psychiatric Service of the University of Minnesota Hospitals. Their names, addresses, final diagnoses, and outstanding symptoms present on admission were recorded on special forms. The next step was to check all the names against the Central Index maintained by the state of Minnesota which is a record system that identifies all persons who have been admitted to any of the state institutions (mental hospitals, epileptic colony, prisons, etc.). Those patients who were shown by the Central Index to have been transferred directly from the University Hospitals to one of the state mental hospitals and who had then remained permanently in a state hospital were included in the study but were not followed up personally. The assumption was made with regard to these patients that they were unable, by reason of severity of illness, to make an adjustment outside of the hospital setting. The next step in the study was to arrange the remaining patients by county of residence, to lay out a travel plan, and to seek to find all of the individual patients. Of the total patient group (1638 cases) the follow-up study found 1261 either in one of the state hospitals or living in the state. This gives a follow-up percentage of 77% of the total group. For practical reasons no attempt was made to follow individuals who had moved away from Minnesota.

With regard to the 23% of the cases who were lost to the follow-up, subsequent study showed that they were more or less uniformly spread throughout all of the diagnostic groups; therefore it was felt that they did not influence the statistical evaluation to any significant extent.

On those patients followed up by personal interview, data was obtained from the following sources:

1. The patient himself. His evaluation of himself, information as to work record, the amount of

medical care he had required, etc., are samples of the items covered in the interview.

2. The patient's family, parents, wife, or husband, etc.
3. County welfare agencies if the patient was known to them.
4. Friends and neighbors. This source, while it gave excellent data at times, was largely fortuitous. When asking directions of neighbors and postmasters, for example, the person might volunteer data which expressed a community attitude toward the patient. Needless to say, this was usually of a type critical to the patient.

The interviewer, at the conclusion of the collection of data about any given person, then graded the person by the following scale. Here again it should be mentioned that the interviewer was using social adjustment criteria in the evaluation process. In thinking of the following grading system it is convenient to keep in mind that it resembles the system of grading used in the University, i.e., A is excellent, B is good, C is mediocre, D is poor, E is fail.

Score A. This category means that the patient had no further trouble of the type for which he was hospitalized originally.

Score B. Patients listed in this group were, largely, making a good social adjustment. To a small extent they had been bothered by the complaints they presented at the time of hospitalization but these occurred very infrequently, bothered the patient or his family to a

*During the years 1938-1944 insulin shock and convulsive shock therapy were not employed in treating psychoses and therefore this group of patients represents a non-shock treated group. It is hoped to utilize this present study as a control group for a subsequent similar study of shock-treated cases.

minimal degree, or had gradually diminished and disappeared within the year following hospitalization. These patients may have spent a short time in a state hospital, usually it was immediately following their initial hospitalization at the University Hospitals and the patient was soon paroled and never returned. The statement characteristically made by patients in the B group was, "I had a little trouble right after I got out of the University Hospital but I've been fine for the past five (or more) years."

Score C. This category is descriptive of the trouble of patients who were in and out of state hospitals or who worked and made a good adjustment for a time but had relapses of the illness for which they were hospitalized. Although these patients had, for relatively long periods of time, been well, they usually had two or three episodes of illness.

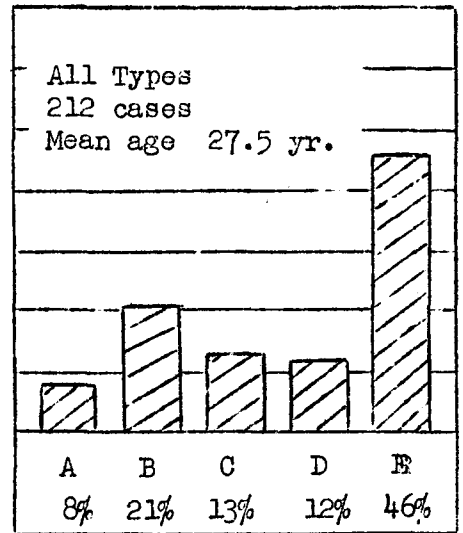
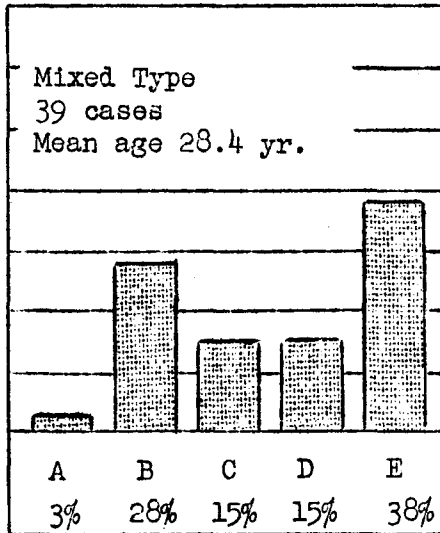
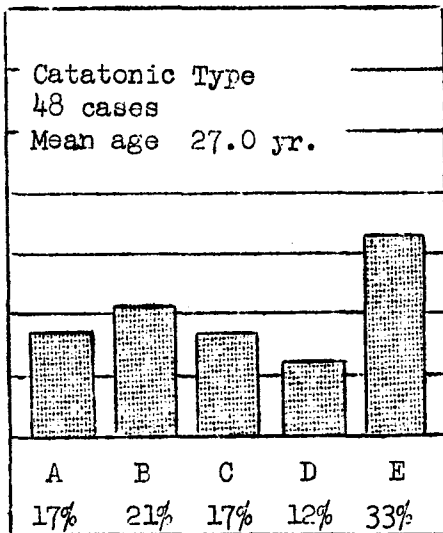
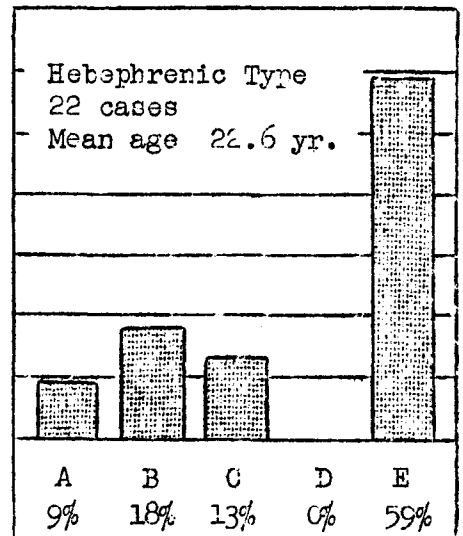
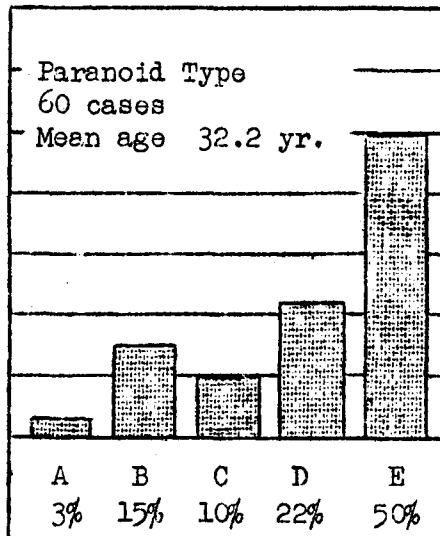
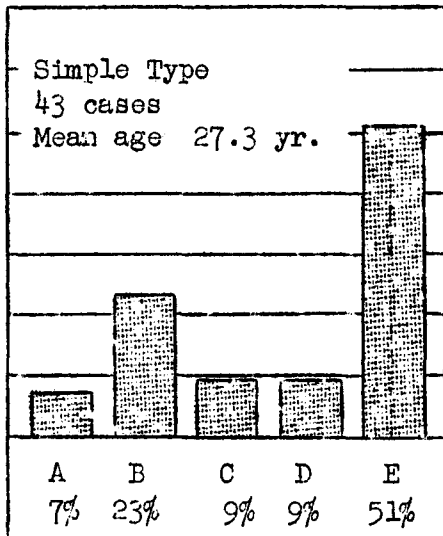
Score D. This category means that the patient had spent more than half the time between hospitalization and the follow-up in an institution incapacitated be-

cause of his illness, or functioning on the inadequate level he was at the time of University hospitalization. These patients were not ill all of the time, but periods of recovery were brief and for the most part the patient or the patient's family considered him to have a large amount of trouble.

Score E. Those patients falling into the E group had had continuous trouble of the type for which they were hospitalized. Many of them were sent from the University Hospitals directly to a state institution and remained there. Others have been cared for at home by their families, but none of them recovered even for a short while.

The next step in the study was to arrange the individuals and their scores by the usual diagnostic categories, and it is this aspect of the follow-up study that is being presented at this time. It is apparent that the follow-up represents a minimum of five years to a maximum of eleven years from the date of University Hospitals admission.

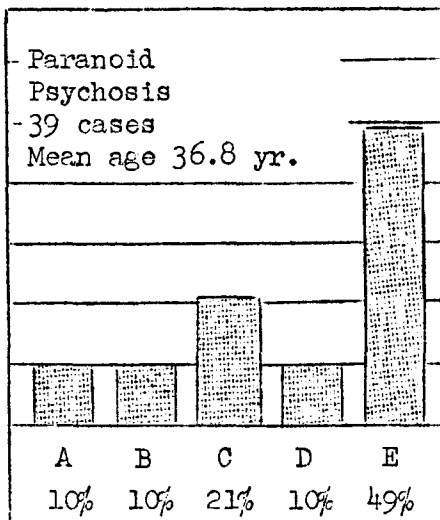
Schizophrenia Group



From this chart it is apparent that the group of patients who obtain this diagnosis have a grave prognosis with 58% of

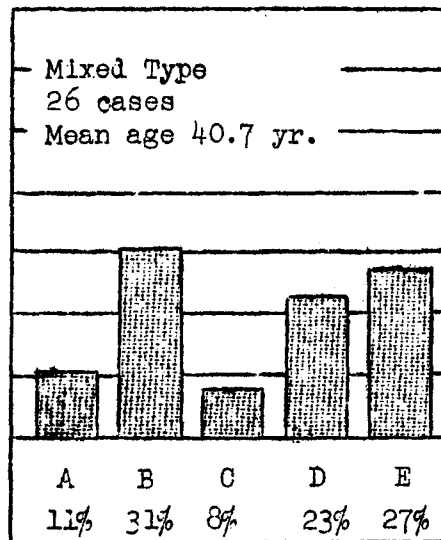
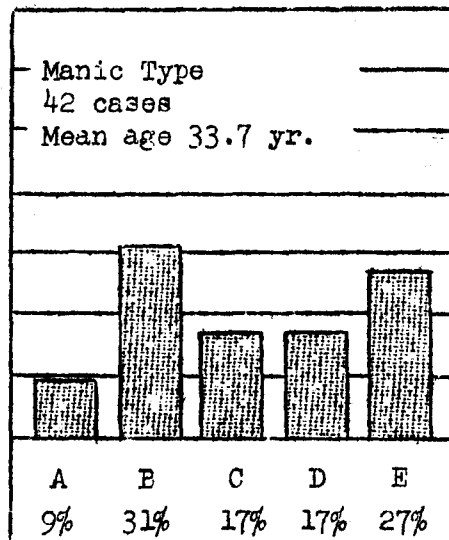
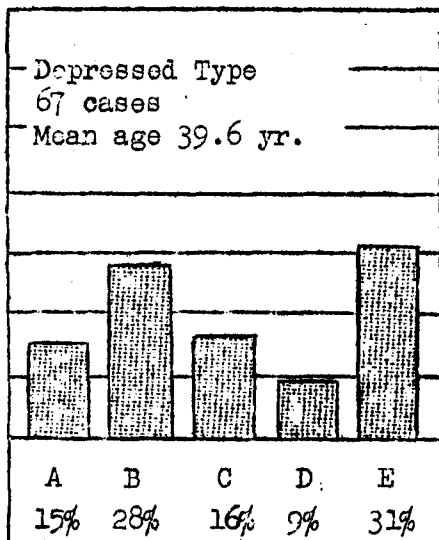
the total falling in groups D and E, 29% have gotten along quite well although only 8% of the total fell in group A.

Paranoid Psychosis

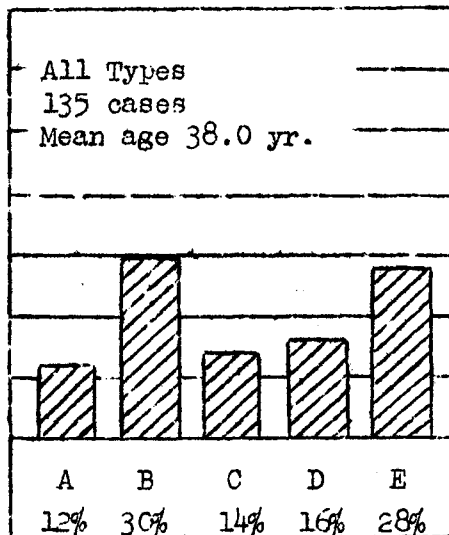


This is a group of psychoses that are closely related to and often difficult to distinguish from paranoid schizophrenia. The follow-up results show that its prognosis is almost identical with A and B 20% in paranoid psychosis and 18% in paranoid schizophrenia; D and E 59% in paranoid psychosis and 72% in paranoid schizophrenia. In any event its diagnosis carries a grave future for the patient.

Manic-Depressive Psychosis

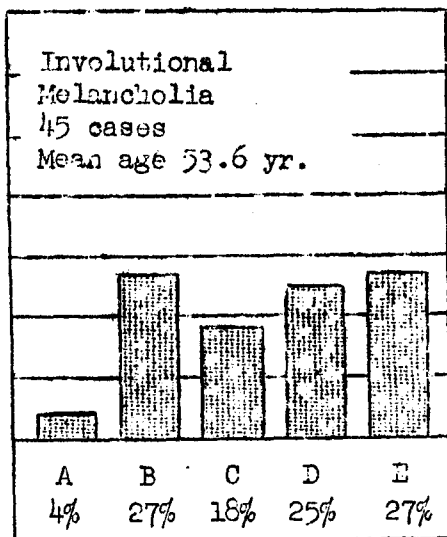


Patients who receive this diagnosis have about an equal chance of getting along reasonably well (A and B equal 42%) and doing poorly (D and E equal 44%). The fact that only 12% of these patients had no fur-



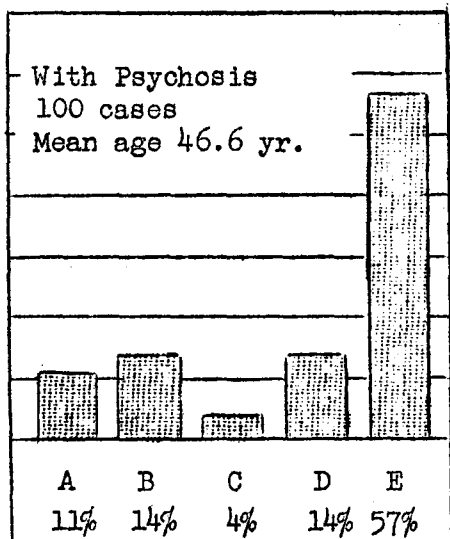
ther difficulty during the follow-up period is somewhat surprising since manic-depressive disease is commonly felt to have a better outlook than this.

Involuntional Melancholia



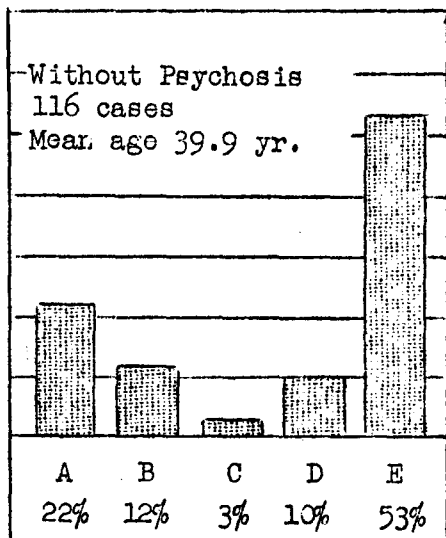
This illness is generally thought to be closely related to the manic-depressive group and some authorities feel that it is the same disease process. It has a grave prognosis (D and E equal 52%) and only 4% of the patients had no further difficulty in passing, involuntional melancholia is generally felt to have a good prognosis when treated with one of the convulsive therapies.

Organic Brain Disease with Psychosis



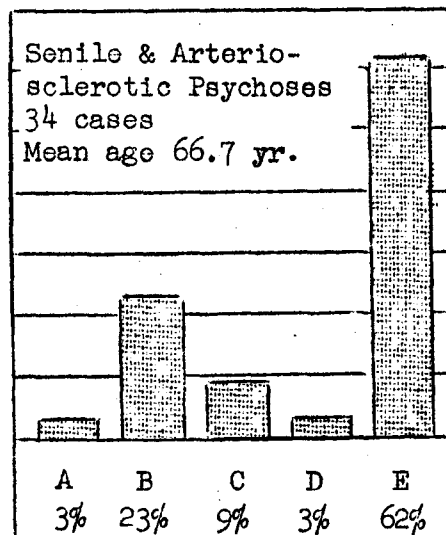
These cases (paresis as an example) indicate that almost three-quarters of the people who receive this diagnosis have a poor outlook for future adjustment.

Organic Brain Disease without Psychosis



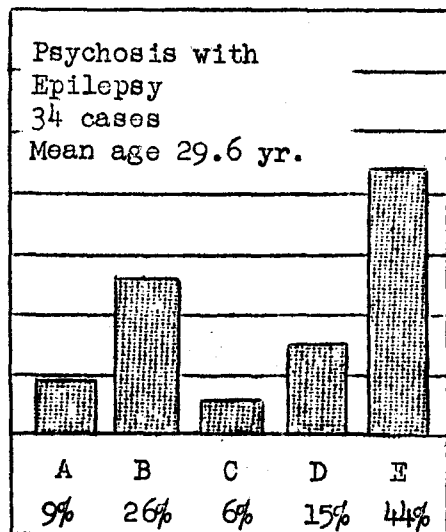
Two-thirds of patients with this diagnosis make a poor adjustment and the remaining third do reasonably well.

Senile and Arteriosclerotic Psychoses



The surprising point about this group is not that the majority have a poor prognosis but that approximately one-quarter of patients do reasonably well. Traditionally, a patient who has received this diagnosis is not expected to recover. This follow-up affirms a finding that has been made in the past fifteen years, namely that a few patients in this group will make a recovery if treated adequately by supportive measures such as diet, vitamins, eradication of foci of infection, etc.

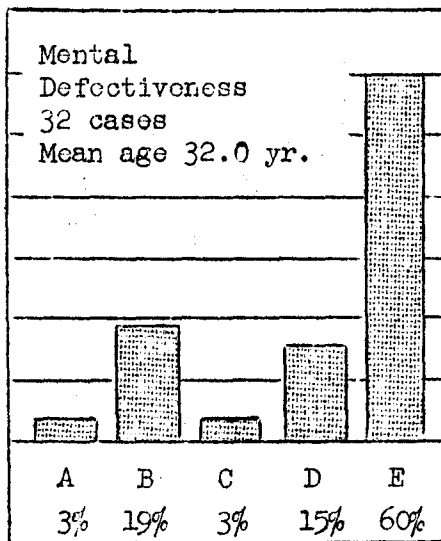
Psychosis with Epilepsy



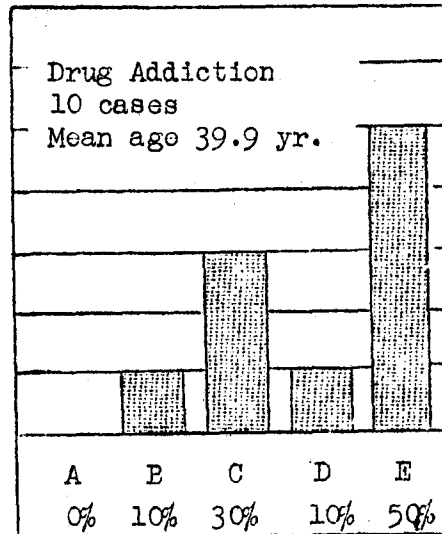
Fifty-nine per cent of this group have a poor prognosis whereas 35% have made a fairly satisfactory adjustment subsequent to hospitalization.

This table re-emphasizes the unsatisfactory state of affairs in treating this common affliction. The following table on drug addiction (ten cases only) seems to indicate the same conclusion.

Mental Defectiveness

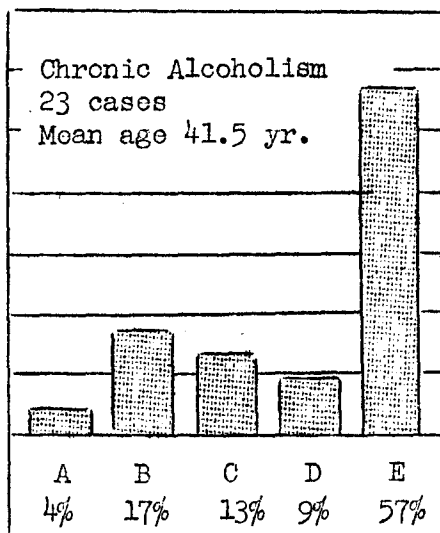


Drug Addiction

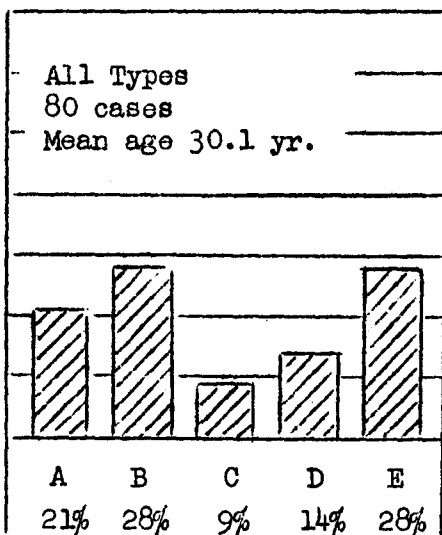
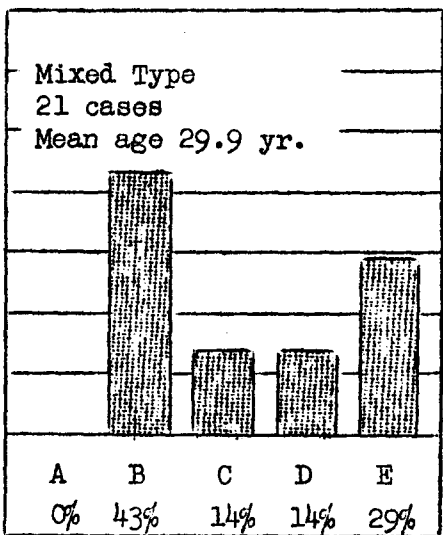
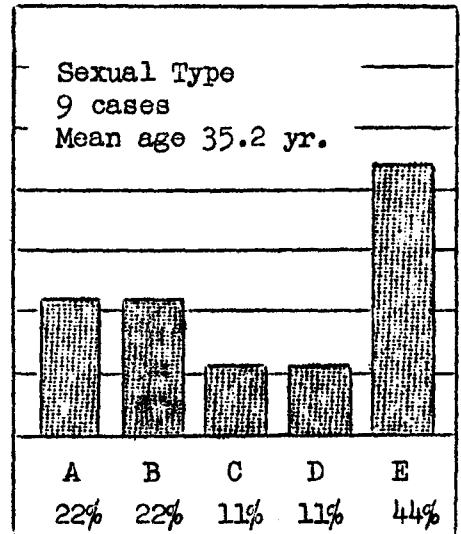
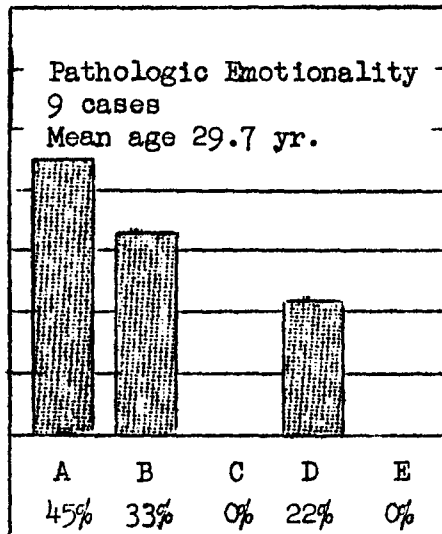
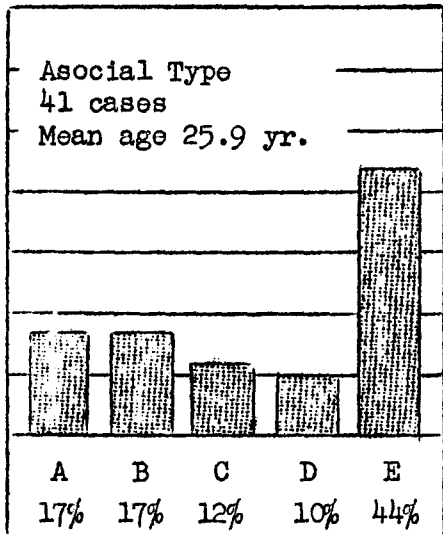


Three-quarters of these patients have been unable to adjust although approximately one-fifth have done quite well. Those who have been able to adjust have probably been materially aided in doing so by the creation of a charitable environment on the part of family and others.

Chronic Alcoholism

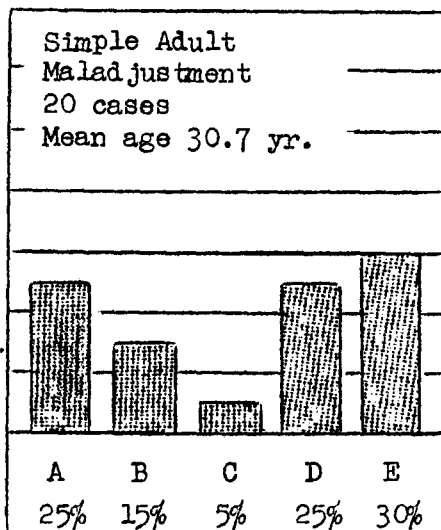


Psychopathic Personality



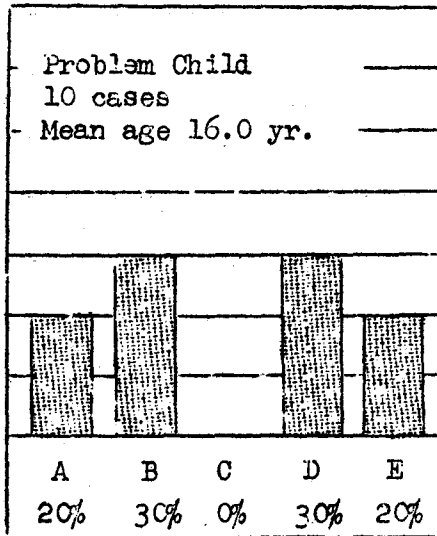
This diagnosis is a relatively meaningless one from several standpoints; mainly because it includes cases of widely divergent personality types and symptom pictures. In any event, the prognosis seems not to be so poor as has been suspected. It is doubtful that there would be much unanimity of opinion about the diagnosis of this condition from one psychiatric hospital to another.

Simple Adult Maladjustment



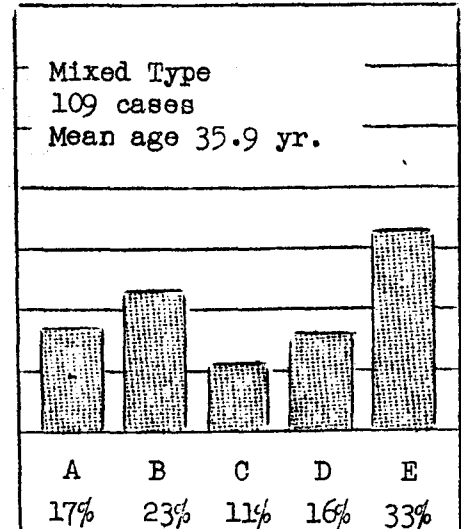
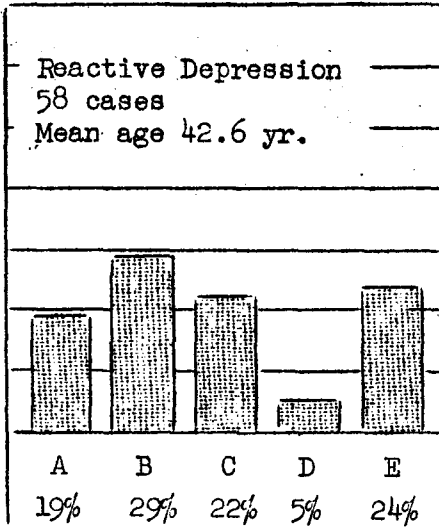
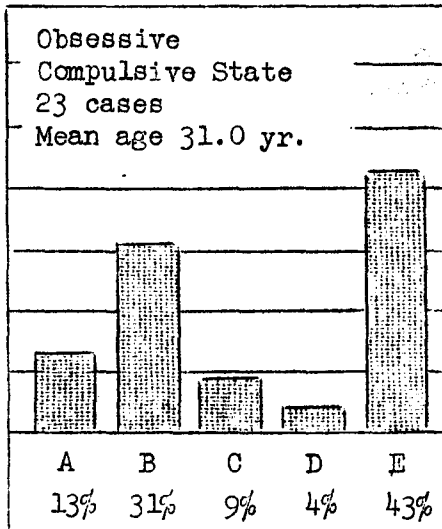
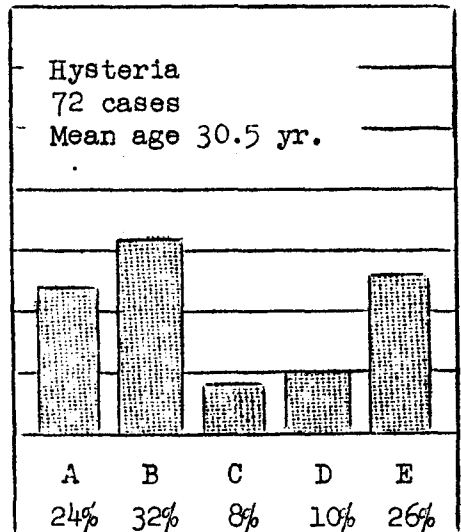
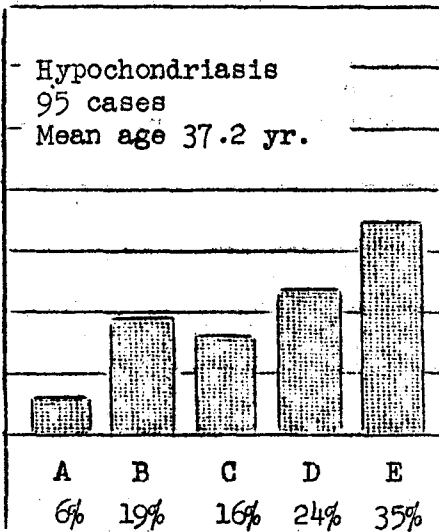
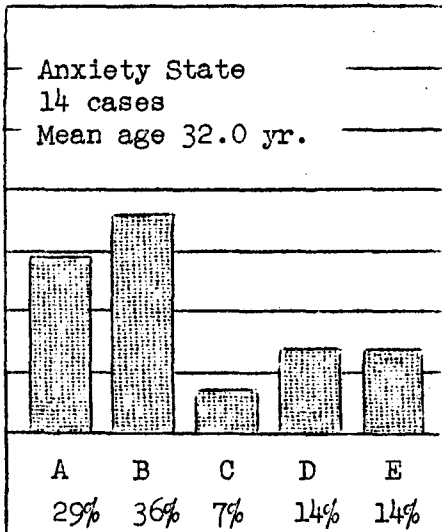
The comments made with regard to psychopathic personality apply also to the diagnosis of this condition. It is a vague "waste-basket" that is convenient to have when one cannot adequately identify an emotional disturbance but does not wish to leave the condition undiagnosed. It is a diagnosis that was made frequently by military psychiatrists in World War II.

Problem Child

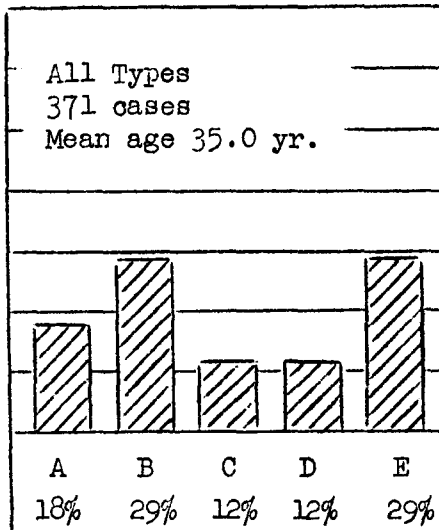


There are only ten cases in this group and the statistical evaluation is not significant. In many respects it is comparable to the diagnosis "simple adult maladjustment."

Psychoneuroses



Patients from this diagnostic group were the largest group in the follow-up series and it is undoubtedly the most interesting group from the standpoint of the general physician, internist, and the non-psychiatric specialist. The results bear out several generally held opinions, i.e., that patients with anxiety state and hysteria tend to have rather favorable prognoses, and that the patient with hypochondriasis tends not to get well. While almost half of the obsessive-compulsive group had poor prognoses (as is generally expected), it is truly surprising to find that 44% of them made a reasonably



good adjustment. One probable implication of these results for the general physician and internist is that whatever time and energy he spends in treating psychoneuroses, that time and energy might best be spent with patients who have an anxiety state and hysteria. By so doing apparently he will be taking advantage of a natural tendency to healing. Although these figures based on hospitalized neurotics do not show it, the most

common psychoneurosis met with in medical practice is regarded as the anxiety state with somatic expression of one sort or another ("psychosomatic" disease).

Summary

One thousand six hundred and thirty-eight patients were admitted to the psychiatric Service of the University of Minnesota Hospitals in the years 1938-1944. Seventy-seven per cent of this group were followed up by personal interview in 1949 and the follow-up results were presented in bar graph form based on the relative adequacy or inadequacy of social adjustment following the period of hospitalization. This is a group of patients who were not treated with shock therapies or, in the case of the organic conditions (such as paresis), antibiotics.

Conclusions

1. The three major psychotic groupings of unknown etiology (schizophrenia, manic-depressive psychosis, and involutional melancholia) have extremely grave prognoses.

2. In the face of such serious prognoses, intensive therapy (including the shock therapies) is indicated in the attempt to alter the prognosis of the above psychoses in a favorable direction.
3. Senile and arteriosclerotic psychoses should not be regarded as having a hopeless prognosis without adequate therapeutic trial of supportive medical measures.
4. Psychoneuroses, particularly the anxiety states and hysteria, have a reasonably good outlook. This statement does not apply to hypochondriasis.

II. MEDICAL SCHOOL NEWS

Coming Events

- January 3 - 5 Continuation Course in Gynecology for General Physicians
January 7 - 9 Continuation Course in Pediatrics for General Physicians
January 21 - 25 Continuation Course in Electrocardiography for General Physicians
Jan. 28 - Feb. 9 Continuation Course in Clinical Neurology for General Physicians
and Specialists

* * *

Minnesota Medical Foundation Elects New Officers

The Board of Trustees of the Minnesota Medical Foundation elected officers at its recent meeting. Dr. Owen H. Wangenstein, Professor and Head of the Department of Surgery, was reelected as President. Dr. Francis W. Lynch, Clinical Professor of the Division of Dermatology, of St. Paul, was elected Vice-President. He succeeds Dr. W. W. Will who retired from the Board after serving continuously since the organization of the Foundation. Dr. Wesley W. Spink, Professor of Medicine, was elected Secretary-Treasurer. Doctors J. Richards Aurelius, St. Paul, Charles G. Sheppard, Hutchinson, and R. S. Ylvisaker, Minneapolis, newly elected members of the Board participated in the meeting as active members of the Board. They were elected at the annual meeting of the Foundation on October 4.

* * *

Mayo Memorial Construction Moves Forward

Alumni and friends of the Medical School will be happy to know that the excavation for the Mayo Memorial Building is now the scene of tremendous activity. After some months of inactivity and uncertainty when plans were being revised and new bids were being awaited, the space between the University of Minnesota Hospitals and the Medical Sciences Building now rings with the sounds of construction. Once again the steam shovels are busy. A steady stream of trucks wheels in and out of the depths of the excavation. Most encouraging of all is the fact that concrete is now being poured, the steel framework is being erected, and the rough outline of the building is each day becoming more clearly discernible. The Mayo Memorial Building as now planned will consist of a tower section of fourteen stories. This section had originally been planned as a 22 story edifice but was reduced in size because of the shortage of funds. Three new wings, each six stories in height, will connect the tower with the Eustis, Elliott, and Todd sections of the present hospital building. A two-level underground garage is included in the plans and will help to relieve the parking problem in the vicinity of the Medical School.

* * *

New Minnesota Medical Foundation Members

Orpheus J. Bizzozero, M.D., Waterbury, Conn.	C. B. Young, M.D., Tyler, Texas
L. D. Massey, M.D., Oxceola, Arkansas	C. Lawrence Johnson, M.D., Kansas City
M. C. Plimpton, M.D., Minneapolis	Ralph E. Smiley, M.D., Mason City, Iowa
David W. Francis, M.D., Morristown	Arden L. Abraham, M.D., Duluth
J. S. Sagel, M.D., Gary, Indiana	Samuel G. Shepard, M.D., Philadelphia
James Rogers Fox, M.D., Minneapolis	

III.

UNIVERSITY OF MINNESOTA MEDICAL SCHOOL
WEEKLY CALENDAR OF EVENTS

Physicians Welcome

December 10 - 15, 1951

Monday, December 10

Medical School and University Hospitals

- 9:00 - 9:50 Roentgenology-Medicine Conference; L. G. Rigler, C. J. Watson and Staff; Todd Amphitheater, U. H.
- 9:00 - 10:50 Obstetrics and Gynecology Conference; J. L. McKelvey and Staff; M-109, U. H.
- 10:00 - 12:00 Neurology Rounds; A. B. Baker and Staff; Station 50, U. H.
- 11:00 - 12:00 Cancer Clinic; K. Stenstrom and A. Kremen; Eustis Amphitheater, U. H.
- 12:15 - 1:20 Obstetrics and Gynecology Journal Club; Staff Dining Room, U. H.
- 12:30 - Physiology Seminar; Experiments on the Physiological Basis of Consciousness; Ernst Gillhorn; 214 Millard Hall.
- 1:30 - 2:30 Pediatric-Neurological Rounds; R. Jensen, A. B. Baker and Staff; U. H.
- 4:00 - Pediatric Seminar; Spontaneous Subarachnoid Bleeding; Benjamin Katz; Sixth Floor West, U. H.
- 4:30 - 5:30 Dermatological Seminar; M-346, U. H.
- 4:30 - Public Health Seminar; 15 Owre Hall.
- 4:30 - Clinical-Medical-Pathological Conference; Todd Amphitheater, U. H.
- 5:00 - 6:00 Urology-Roentgenology Conference; C. D. Creevy, O. J. Baggenstoss, and Staff; Eustis Amphitheater.

Minneapolis General Hospital

- 7:30 a.m. Fracture Grand Rounds; Dr. Zierold, Station A.
- 11:00 - Pediatric Rounds; Dr. Top; 7th Floor.
- 12:30 p.m. Surgery Grand Rounds; Dr. Zierold; Station E.
- 1:00 - 2:00 X-ray Conference; Classroom, 4th Floor.
- 1:30 - Pediatric Rounds; Dr. Ulstrom; 4th Floor.

Veterans Administration Hospital

- 9:00 - G. I. Rounds; R. V. Ebert, J. A. Wilson, Norman Shriffter; Bldg. I.
- 11:30 - X-ray Conference; Conference Room; Bldg. I.

Monday, December 10 (Cont.)

Veterans Administration Hospital (Cont.)

- 2:00 - Psychosomatic Rounds; Building 5.
- 3:30 - Psychosomatic Rounds; Building 1, Dr. Aldrich.

Tuesday, December 11

Medical School and University Hospitals

- 8:30 - Conference on Diet Endocrines and Cancer; M. B. Visscher; Physiology Library.
- 9:00 - 9:50 Roentgenology-Pediatric Conference; L. G. Rigler, I. McQuarrie and Staff; Eustis Amphitheater, U. H.
- 9:00 - 12:00 Cardiovascular Rounds; Station 30, U. H.
- 12:30 - 1:20 Pathology Conference; Autopsies; J. R. Dawson and Staff; 102 I. A.
- 12:30 - Selected Topics, Permeability and Metabolism; Nathan Lifson; Physiology Library.
- 3:15 - 4:20 Gynecology Chart Conference; J. L. McKelvey and Staff; Station 54, U. H.
- 4:00 - 5:00 Pediatric Rounds on Wards; I. McQuarrie and Staff; U. H.
- 5:00 - 6:00 X-ray Conference; Presentation of Cases by Veterans Hospital Staff; Drs. Fink, O'Loughlin, et al.; Eustis Amphitheater, U. H.

Ancker Hospital

- 1:00 - 2:30 X-ray Surgery Conference; Auditorium.

Minneapolis General Hospital

- 8:00 - Pediatric Rounds; Dr. Gibbs; 5th Floor Annex.
- 10:00 - Psychiatric Grand Rounds; J. C. Michael and Staff; 3rd Floor Annex.
- 11:00 - Pediatric Rounds; Dr. Platou; 7th Floor.

Veterans Administration Hospital

- 7:30 - Anesthesiology Conference; Conference Room, Bldg. I.
- 8:30 - Infectious Disease Rounds; Dr. Hall.
- 8:45 - Surgery Journal Club; Conference Room, Bldg. I.
- 9:00 - Liver Rounds; Drs. Nesbitt and MacDonald.
- 9:30 - Surgery-Pathology Conference; Conference Room, Bldg. I.

Tuesday, December 11. (Cont.)

Veterans Administration Hospital (Cont.)

- 10:30 - Surgery Tumor Conference, Conference Room, Bldg. I.
1:00 - Surgery Chest Conference; T. Kinsella and Wm. Tucker; Conference Room, Bldg. I.
2:00 - 2:50 Dermatology and Syphilology Conference; H. E. Michelson and Staff; Bldg. III.
3:30 - 4:20 Clinical Pathological Conference; Conference Room, Bldg. I.

Wednesday, December 12

Medical School and University Hospitals

- 8:00 - 8:50 Surgery Journal Club; O. H. Wangensteen and Staff; M-109, U. H.
8:00 - 9:00 Roentgenology-Surgical-Pathological Conference; Allen Judd and L. G. Rigler; Todd Amphitheater, U. H.
11:00 - 12:00 Pathology-Medicine-Surgery Conference; Surgery Case; O. H. Wangensteen, C. J. Watson and Staffs; Todd Amphitheater, U. H.
12:30 - 1:20 Radio-Isotope Seminar; Subject to be announced; Al Schultz; 12 Owre Hall.
1:30 - Conference on Circulatory and Renal Systems Problems; M. B. Visscher; 116 Millard Hall.
5:00 - 5:50 Urology-Pathological Conference; C. D. Creevy and Staff; Eustis Amphitheater, U. H.
5:00 - 6:00 Vascular Conference; Todd Amphitheater, U. H.
5:00 - 7:00 Dermatology Clinical Seminar; Dining Room, U. H.
7:00 - 8:00 Dermatology Journal Club; Dining Room, U. H.
8:00 - 10:00 Dermatological-pathology Conference; Review of Histopathology Section; Robert Goltz; Todd Amphitheater, U. H.

Ancker Hospital

- 8:30 - 9:30 Clinico-Pathological Conference; Auditorium.
3:30 - 4:30 Journal Club; Surgery Office.

Minneapolis General Hospital

- 9:30 - Pediatric Rounds; Dr. Platou; 7th Floor Annex.
11:00 - Pediatric Rounds; Dr. Top, 7th Floor.
12:00 - Surgery Seminar; Dr. Zierold; Classroom.

Wednesday, December 12 (Cont.)

Minneapolis General Hospital (Cont.)

- 12:15 - Pediatric Conference; 4th Floor Annex.
- 1:30 - Pediatric Rounds; Dr. Huenekens and Dr. Ulstrom; 4th Floor Annex.
- 2:00 - 4:00 Infectious Disease Rounds; 8th Floor.
- 4:00 - 5:00 Infectious Disease Conference; Conference Room, 8th Floor.

Veterans Administration Hospital

- 8:30 - 10:00 Orthopedic X-ray Conference; Conference Room, Bldg. I.
- 8:30 - 12:00 Neurology Rehabilitation and Case Conference; A. B. Baker.
- 7:00 p.m. Lectures in Basic Science of Orthopedics; Conference Room, Bldg. I.

Thursday, December 13

Medical School and University Hospitals

- 9:00 - 9:50 Medicine Case Presentation; C. J. Watson and Staff; M-109, U. H.
- 10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U. H.
- 11:00 - 12:00 Cancer Clinic; K. Stenstrom and A. Kremen; Todd Amphitheater, U. H.
- 12:30 - Physiological Chemistry Seminar; 214 Millard Hall.
- 1:30 - 4:00 Cardiology X-ray Conference; Heart Hospital Theater.
- 4:00 - 5:00 Physiology-Surgery Conference; Todd Amphitheater, U. H.
- 4:30 - 5:20 Ophthalmology Ward Rounds; Erling W. Hansen and Staff; E-534, U. H.
- 5:00 - 6:00 X-ray Seminar; Thoracic Surgery Conferences; Dr. Varco, et al; Eustis Amphitheater, U. H.
- 7:30 - 9:30 Pediatric Cardiology Conference and Journal Club; Review of Current Literature 1st hour and Review of Patients 2nd hour; 206 Temporary West Hospital.

Minneapolis General Hospital

- 8:00 - Pediatric Rounds; Dr. Gibbs; 5th Floor.
- 8:30 - Neurology Rounds; Dr. Heilig, 4th Floor Annex.
- 9:00 - Neurology Grand Rounds; J. C. Michael and Staff; Station A.
- 11:00 - Pediatric Rounds; Dr. Platou; 7th Floor.
- 11:30 - Pathology Conference; Main Classroom.

Thursday, December 13 (Cont.)

Minneapolis General Hospital (Cont.)

- 1:00 - 2:00 Fracture - X-ray Conference; Dr. Zierold; Classroom, 4th Floor Annex.
2:00 - Psychiatry Rounds; Dr. Benton; 4th Floor Annex.

Veterans Administration Hospital

- 8:00 - Surgery Ward Rounds; Lyle Hay and Staff; Ward 11.
9:15 - Surgery Grand Rounds; Conference Room, Bldg. I.
11:00 - Surgery Roentgen Conference; Conference Room, Bldg. I.

Friday, December 14

Medical School and University Hospitals

- 8:30 - 10:00 Neurology Grand Rounds; A. B. Baker and Staff; Station 50, U. H.
9:00 - 9:50 Medicine Grand Rounds; C. J. Watson and Staff; Todd Amphitheater, U.H.
10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U. H.
10:30 - 11:50 Otolaryngology Case Studies; L. R. Boies and Staff; Out-Patient Department, U. H.
11:45 - 12:50 University of Minnesota Hospitals Staff Meeting; Anal Pruritus; Howard M. Frykman and Walter A. Fansler; Powell Hall Amphitheater.
1:00 - 2:50 Neurosurgery-Roentgenology Conference; W. T. Peyton, Harold O. Peterson and Staff; Todd Amphitheater, U. H.
2:00 - 3:00 Dermatology and Syphilology Conference; Presentation of Selected Cases of the Week; H.E. Michelson and Staff; W-312, U. H.
3:00 - 4:00 Neuropathological Conference; F. Tichy; Todd Amphitheater, U. H.
4:00 - 5:00 Dermatology Seminar; W-312, U. H.
4:00 - Neurophysiology Seminar; 113 Owre Hall.
5:00 - Urology Seminar and X-ray Conference; Eustis Amphitheater, U. H.

Ancker Hospital

- 1:00 - 3:00 Pathology-Surgery Conference; Auditorium.

Minneapolis General Hospital

- 8:00 - Pediatric Allergy Rounds; Dr. Nelson; 4th Floor.
11:00 - Pediatric Rounds; Dr. Top; 7th Floor.

Friday, December 14 (Cont.)

Minneapolis General Hospital (Cont.)

- 11:00 - Pediatric-Surgery Conference; Drs. Wyatt and F. Adams; Classroom, Sta. I.
12:00 - Surgery-Pathology Conference; Drs. Zierold and Coe; Classroom.
1:30 - Pediatric Rounds; Dr. Ulstrom, 4th Floor.

Veterans Administration Hospital

- 10:30 - 11:20 Medicine Grand Rounds; Conference Room, Bldg. I.
1:00 - Microscopic-Pathology Conference; E. T. Bell; Conference Room, Bldg. I.
1:30 - Chest Conference; Wm. Tucker and J. A. Meyers; Ward 62, Day Room.
3:00 - Renal Pathology; E. T. Bell; Conference Room, Bldg. I.

Saturday, December 15

Medical School and University Hospitals

- 7:45 - 8:50 Orthopedic X-ray Conference; Wallace H. Cole and Staff; M-109, U. H.
9:00 - 9:50 Medicine Case Presentation; C. J. Watson and Staff; E-221, U. H.
9:00 - 10:30 Pediatric Grand Rounds; I. McQuarrie and Staff; Eustis Amphitheater, U. H.
9:15 - 10:00 Surgery-Roentgenology Conference; J. Friedman, O. H. Wangenstein and Staff; Todd Amphitheater, U. H.
10:00 - 11:30 Surgery Conference; Todd Amphitheater, U. H.
10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U. H.
10:00 - 12:50 Obstetrics and Gynecology Grand Rounds; J. L. McKelvey and Staff; Station 44, U. H.

Minneapolis General Hospital

- 8:00 - Pediatric Rounds; Dr. Gibbs; 5th Floor.
11:00 - 12:00 Pediatric Clinic; Dr. Thomas and Dr. May. Classroom, 4th Floor Annex.

Veterans Administration Hospital

- 8:00 - Proctology Rounds; W. C. Bernstein and Staff; Bldg. III.
8:30 - Hematology Rounds; P. Hagen and E. F. Englund.