

Under these conditions treatment is indicated. It is made to rehabilitate the patient by the use of the method for that type of

are signs of local process, conservative close observation day after patient has greatest this time the abdominal occasionally inflammatory mass, it should not be unless it is free to be removed without adhesions. If accomplished, the patient in two to three days ensue during operation, of course, obviate the occur-

whether operated or handled in emergency is administered per rectum and is vomiting, constituted. Fluids orally and by vein. Infusions of 250 cc oxygen therapy by potent weapons in operation by placing of the patient's use of Fowler's the patient and rising. Morphine every three to occlusion are avoided or a few minutes of distention is in order. Engberg's serum is not of peritonitis index.

**Sedimentation Rate in**

and his collaboration clinic a few years ago the sedimentation rate of the

red blood cells in acute abdominal disease has done much toward clarifying the position that should be occupied by this valuable test in the differential diagnosis of acute abdominal conditions and has pointed the way to the prominent part this simple laboratory procedure will undoubtedly play in the future. Bannick found, after close observation in a number of cases in which the diagnosis was substantiated either by operation or bacteriologically, that:

1. The sedimentation rate is normal in acute simple appendicitis, but after rupture, with either localized or generalized peritonitis or abscess, the rate becomes elevated. It is readily seen how this test, which will give definite information as to the presence or absence of perforation, will be of unlimited value in the surgical management of acute appendicitis.

2. Occasionally, in cases of acute pelvic inflammatory disease, the sedimentation rate will be within normal limits during the first forty-eight hours after the onset of abdominal pain. Beyond this time it is invariably elevated. This finding shows that one must not rely on a normal sedimentation rate in distinguishing appendicitis and acute pelvic disease within the time limit stated.

3. In acute cholecystitis and acute infections of the urinary tract, the sedimentation rate was usually elevated, even early in the disease, but not invariably so.

Bannick<sup>1</sup> hastened to caution that the sedimentation rate, although more trustworthy than

the white blood count, is not infallible and certainly should take second place to a careful history and physical examination.

**Summary**

Emergency operations are usually lifesaving procedures and the surgeon should choose the most conservative procedure available which is compatible with the problem at hand. Corrective operation can frequently be advantageously delayed until the patient has recovered from the emergency lifesaving operation with less risk to the patient and a better probability of carrying out a complete and curative procedure. This is especially true in acutely perforated peptic ulcer and acute intestinal obstruction. It also holds in the severe grades of acute cholecystitis, acute appendicitis and strangulated hernia.

The sedimentation rate is of definite value in the differential diagnosis of acute abdominal diseases.

**References**

1. Bannick, E. G.: Sedimentation rate of the blood; its practical application in clinical medicine; preliminary report. Proc. Staff Meet., Mayo Clin., 8:81-87, (Feb. 8) 1933.
2. Bannick, E. G., Gregg, R. O., and Guernsey, C. M.: The erythrocyte sedimentation rate; the adequacy of a simple test and its practical application in clinical medicine. Jour. A.M.A., 109:1257-1262, (Oct. 16) 1937.
3. Guthrie, Donald, and Sharer, R. F.: Permanence of cure following ruptured duodenal ulcer. Jour. A.M.A., 107:1018-1023, (Sept. 26) 1936.
4. Priestley, J. T.: Serum therapy as an adjunct to the surgical treatment of appendicitis with rupture and peritonitis; a preliminary report. Proc. Staff Meet., Mayo Clin., 8:753-755, (Dec. 13) 1933.
5. Priestley, J. T., and McCormick, C. J.: Generalized peritonitis secondary to rupture of the appendix; with special reference to serum therapy. Surg., Gynec. and Obst., 63: 675-680, (Nov.) 1936.

**THE TREATMENT OF MENTAL DEFECTIVES IN MINNESOTA\***

E. J. ENGBERG, M.D., Superintendent, Minnesota School for Feeble-minded  
Faribault, Minnesota

THE experience of years has changed the original idea that the purpose of state institutions for the care and treatment of mental defectives is to provide segregation for life, although this is still necessary for the majority of those committed who are idiots or imbeciles. Idiots are individuals with intelligence quotients up to 24 per cent (Kuhlmann scale) and mental ages up to two years; imbeciles are those with intelligence quotients from 25 to 49 per cent and mental

ages from three to six years. However, with the more frequent recognition of the high grade mental defectives or morons with mental ages from seven to eleven years and intelligence quotients from 50 to 74 per cent, larger numbers of this type are, because of associated social problems, being admitted to the institutions for feeble-minded. Unfortunately, the public usually understands that the term moron describes a person guilty of some terrible sex crime. This may be because the lay press tends to refer to such perpetrators as morons. These crimes, usually,

\*Read at the annual meeting of the Minnesota State Medical Association May 31, 1939.

MAY, 1940

NOTICE: This material may be protected by copyright law (U.S. Code Title 17)

40-TMD-EJE

however, are not committed by feeble-minded persons but by individuals with psychopathic personalities requiring treatment and control different from that needed by mental defectives.

Many of the moron group can return to their communities to be entirely or partly self-supporting under supervision. This is highly desirable both for humanitarian and economic reasons. Expanded and improved school departments have increased the number of these children who may have the benefit of proper treatment in state institutions through shortening the average time spent there for training. For this reason, each child is carefully studied to determine the amount of academic work that should be taught. The type of vocational training to be given is determined in part by the special aptitude present and in part by whether the individual will return to a rural or urban community. Special attention is given to recognize and correct improper habits and emotional reactions. The educational and recreational programs are planned to try to develop a proper social adjustment.

The new arrival sent to our institution by the Board of Control\* after commitment enters first the hospital for fourteen days of isolation to prevent the spread of contagious diseases. During this time, routine physical, neurological, and psychiatric examinations are made as well as laboratory studies of the blood, urine, smears from the nose and throat, the blood Wassermann test, the Mantoux test, an x-ray of the lungs to prove the presence or absence of active tuberculosis, as well as spinal fluid examinations, when indicated. Those unprotected against smallpox are vaccinated upon arrival. Each case is reviewed by the physician in charge with the entire medical staff at the weekly medical rounds and agreement is reached as to the cause and diagnosis of the mental defect present, and of the treatment of physical disabilities present. When necessary, arrangements are made for consultation with specialists in various fields. A full-time dentist checks the condition of the teeth of each child upon admission and takes care of dental needs while in the institution. Special attention is given to provide an adequate and

\*The Board of Control has been replaced by the Department of Social Security which consists of the Divisions of Employment and Security, Social Welfare, and Public Institutions, as created by the Reorganization Act which was passed by the last legislature. Feeble-minded persons are committed to the guardianship of the Director of Social Welfare, and the School for Feeble-Minded is operated under the supervision of the Director of Public Institutions.

well-balanced diet, together with special diets when required.

Each week a general Staff Case Conference occurs at which are present the resident physicians, the principal of the school department, the social service workers, and the dormitory division supervisors, with the superintendent presiding. Each new arrival is presented in person with medical, social, and school histories, except for low grades who are cleared by record only. It is determined to which dormitory the child will be assigned; the type of formal training, if any, to be given; or the kind of institutional work to be assigned if training is not necessary or desirable. The newly admitted fall into one of six classes:

1. For segregation, low grade defectives and those seriously crippled. These require continuous nursing care.
2. For segregation, low grade defectives able to do some type of institution work.
3. For segregation, chronic delinquents who are assigned to special locked buildings for each sex.
4. For sterilization and immediate return to the community.
5. Defective delinquent girls transferred for sterilization from the State School for Delinquent Girls at Sauk Center.
6. Those desirable for placement after completing period of training.

The last group is referred to the School Department. On April 25, 1939, this consisted of:

- I. *Teachers:*
  - One principal and an assistant.
  - One librarian.
  - One teacher of music and one bandmaster.
  - Six pre-vocational or manual arts teachers.
  - Six industrial teachers.
  - Eight academic teachers.
  - Two physical education teachers.
- II. *Rooms:*
  - Sixteen in the school building.
  - Six industrial rooms in other buildings.
- III. *Children:*
  - 213 children in the academic department with intelligence quotients above 50 per cent and between six and eighteen years of age.
  - 75 boys in industrial departments, with intelligence quotients from 30 to 50 per cent and between six and eighteen years of age.
  - 99 girls in industrial departments, with intelligence quotients from 30 to 50 per cent and from six to eighteen years of age.

83 boys in vocational shops and dairy with intelligence quotients above 45 per cent and from seventeen to forty years old.  
 29 girls in vocational departments with intelligence quotients above 45 per cent and from seventeen to forty years old.

The School Department reports to the Case Conference the record of each child as soon as training is completed to determine whether community placement is desirable. Favorable action occurs only if the individual is considered likely to possess all the qualities necessary to maintain himself in whole or in part under local supervision. If approval occurs, the County Welfare Board is so informed, together with a statement of the appearance, physical condition, training and proficiency, habits, and emotional stability of the individual with the recommendation that plans for placement be undertaken. Placement is recommended by the Case Conference if the members approve the plans submitted. The person is discharged from the institution when authorization is received from the Board of Control, and thereafter is under the permanent supervision of County Welfare Board. Ordinarily, a female in the child-bearing years, or a male, irrespective of age, is not paroled unless sterilized.

Group four, consisting of those admitted for sterilization and immediate return to the community, are represented by cases in which one or both mates in a family are sent to us for the purpose of sterilization, upon the recommendation of the County Welfare Board. They return to their own homes after convalescence. A case in this group is that of a man thirty-two years old whose intelligence quotient was 43. He had lived all his life on a farm and had good habits. All the members of his family were subnormal and depended upon him to do most of the work. When his County Welfare Board learned that he had married, steps were taken to have him committed as feeble-minded and a few days after his marriage he agreed to enter our institution immediately to be sterilized and was then paroled to his home. Another one of this group was a mother, thirty-nine years of age, with an intelligence quotient of 59, who was sent to our hospital during the past year to be confined and who had consented to sterilization thereafter. She gave birth to her fifteenth child, of whom all but one were living. It had been determined before she was sent to us that three

of her children were morons, one was dull-normal, and the others had not had a psychometric examination. Five of them were of preschool age and the attendance of the others at school was intermittent because of the laxity of the parents. The two eldest daughters became illegitimately pregnant at the ages of fifteen and seventeen years respectively, and one of them has been committed as feeble-minded. During the year 1938, twenty-four women, after commitment, were admitted for confinement with the possibility of sterilization if a plan for their return to the community were approved. For seventeen of this group such a procedure is evolving or has been completed. Nine of the twenty-four are unmarried mothers, nine are married and already have families which exhibit degrees of mental defect, while six have been married, and are not living with their husbands—the last child being illegitimate.

The fifth group is made up of girls transferred to us from the State School for Delinquent Girls at Sauk Center. This institution is not one planned for the care of feeble-minded but some are found to be mentally defective after admission and these are committed to the custody of the State Board of Control. However, because of our lack of space, their training is completed at Sauk Center and those considered suitable for placement are sent to us for sterilization. This group will be transferred to an institution for feeble-minded immediately after commitment when sufficient space is provided.

Last August a questionnaire was sent to the County Welfare Boards relative to those on parole from our institution to determine how well they were adjusting to community life. Of 1,190 sent, 906 responses were received, of which 765 referred to females and 141 to males. The data have not been completely tabulated but the reports leave a favorable impression and justify the efforts to return desirable, trained mental defectives to life outside the institution under proper supervision. A study made in Hennepin County March 31, 1939, of individuals on parole from the institution, showed that there were at the time, 102 of 140 females, and 29 of 49 males, employed under the supervision of the County Welfare Board.

Since 1921 our institution has shared with the state in the splendid work done by Dr. F. Kuhlmann as Director of the Division of Examina-

h special diets  
 ase Conference  
 resident physi-  
 department, the  
 dormitory divi-  
 rintendent pre-  
 sented in per-  
 school histories,  
 cleared by rec-  
 rich dormitory  
 type of formal  
 the kind of in-  
 if training is  
 newly admitted  
 ctives and those  
 : continuous nurs-  
 ctives able to do  
 ents who are as-  
 ; for each sex.  
 eturn to the com-  
 rred for steriliza-  
 Delinquent Girls  
 after completing  
 to the School  
 , this consisted  
 ndmaster.  
 s teachers.  
 ildings.  
 artment with in-  
 cent and between  
 , with intelligence  
 cent and between  
 , with intelligence  
 nt and from six  
 MINNESOTA MEDICINE

MENTAL DEFECTIVES IN MINNESOTA—ENGBERG

ADMISSIONS

	Moron		Imbecile		Idiot		Total	
	M	F	M	F	M	F	M	F
New admissions	93	151	40	38	25	14	158	203
	244		78		39		361	
Readmissions	24	25	9	3	2	0	35	28
	49		12		2		63	
Total	117	176	49	41	27	14		
	293		90		41			
Infants born or admitted here with mother for nursing care. Returned to county of residence at three months of age.							13	15
							28	
Grand Total							206	246
							452	

tion and Classification of the State Board of Control. All the mental testing done in our institution has been under his direction and all questionable cases have been referred to him for a recommendation as to disposition. Those determined not to be feeble-minded are discharged as soon as other plans have been made for them. Dr. Kuhlmann has been responsible, also, for the broad testing program conducted in all counties of the state. On March 1, 1939, tests showing intelligence quotients of less than 75 per cent had been given to 25,137 persons on an individual basis since 1923 and, during this period 7,256 committed to state guardianship as feeble-minded. However, on that date there was of record a total of 9,144 mentally defective persons receiving some kind of care, treatment, supervision or training at public expense. They were distributed as follows:

- 2510—in the School for Feeble-Minded.
- 493—in other institutions, committed.
- 1450—satisfactorily adjusted outside but committed.
- 1194—committed, awaiting institutionalization.
- 3497—in special classes. This is an estimate. It is the number of children enrolled in forty cities and towns conducting special classes for sub-normal children during this school year 1937-1938. Very few of these are committed as feeble-minded.

ANALYSIS OF DISCHARGES  
For the Calendar Year 1938

	Males		Females		Total
	Ster.	Not Ster.	Ster.	Not Ster.	
To county supervision after period of institutionalization	12	5	32	8	57
To county supervision after sterilization only	17		35		52
Supervision of Lynnhurst Club, Saint Paul			24		24
To county other than that of residence (Farm placement)	7				7
To county after confinement and sterilization			15		15
Transferred to other institutions	3	27	3	6	39
Infants returned when three months old to county after birth here or after providing nursing care only, when admitted with mother		13		14	27
Supervision of home school			6	1	7
Escapes		11	6	4	21
Deaths		31	1	12	44
Totals	39	87	122	45	293
	126		167		

The total of 9,144 given above does not include any of the 932 patients in the Colony of Epileptics at Cambridge. The majority of these are mentally defective in addition to suffering from epilepsy, and properly increase the known total of mental defectives in the state to about 10,076.

Annual commitments are now in excess of 700 per year, and the waiting list of 1,200 is already so large that from three to five years elapses after commitment before space becomes available at Faribault. This unfortunate condition

will now be another inst years we ha to its maxim inmates in lows: 2,245 1936; 2,261 in 1939. H be limited, from the in will be the many of the dle in the c hyperactive, those with l children; an with delinqu made by the married to l or in private some of the vised in thei children.

The acco show the m Faribault In calendar ya The above during a ya lation was 2

UNUNITI mur at among elderl Many of the enough to me made on peo measures nee

Selection of If disability social and ec

\*From the Sect Rochester, Minnes

MAY, 1940

UNUNITED FRACTURES OF NECK OF FEMUR—HENDERSON

ARGES  
r 1938

Females		Total
Ster.	Not Ster.	
32	8	57
35		52
24		24
		7
15		15
3	6	39
		14
6	1	7
6	4	21
1	12	44
122	45	293
167		

...now become noticeably worse until space at  
...other institution is provided, as in the past two  
...years we have been able to increase our capacity  
...its maximum. This is shown by the record of  
...mates in the institution as of April 29 as fol-  
...ows: 2,245 in 1934; 2,263 in 1935; 2,274 in  
...1936; 2,261 in 1937; 2,373 in 1938; and 2,537  
...in 1939. Hereafter, new admissions will have to  
...be limited, however, to the number discharged  
...from the institution. Those on the waiting lists  
...will be the problems of the local counties and  
...many of them it will be almost impossible to han-  
...dle in the community, especially the low grade  
...hyperactive, destructive, or untidy children; or  
...those with bad sex habits in families with other  
...children; and the high grade mental defectives  
...with delinquent tendencies. Arrangements are  
...made by the County Welfare Boards for the un-  
...married to live with families in boarding homes,  
...or in private institutions of various kinds; while  
...some of the married ones, instead, may be super-  
...vised in their own homes—sometimes with their  
...children.

The accompanying tables are presented to  
...show the movements of the population at the  
...Faribault Institution for Feeble-Minded in the  
...calendar year 1938.

The above admissions and discharges occurred  
...during a year in which our average daily popu-  
...lation was 2,349 (females 1,126; males 1,223)

and is representative of what will probably be  
...the record in the future except for the reduced  
...number of new admissions.

In closing, it is proper to repeat that although  
...state institutions still play a necessary part, they  
...cannot solve the entire problem of the care and  
...treatment of mental defectives. In other words,  
...the solution is not as simple as merely the com-  
...mitment to an institution. Rather, the problem  
...is so great that we must plan for reasonable con-  
...trol, rather than for complete solution. This  
...requires the combined, coördinated efforts of the  
...local communities, schools, courts, local county  
...welfare boards, institutions, and the state de-  
...partment. It is essential that physicians in local  
...communities recognize the condition when en-  
...countered in practice so that they may personal-  
...ly, or through reference to qualified specialists,  
...give proper advice to the patient's family or wel-  
...fare agencies and also, when necessary, to prop-  
...erly meet the legal requirements for possible  
...commitment. To diagnose and recognize the  
...needs for low grade mental defectives is not dif-  
...ficult, but to do the same for morons requires  
...a thorough knowledge of this group. The fail-  
...ure to recognize all mental defectives presenting  
...social problems and the failure or delay in es-  
...tablishing proper control of them results in great  
...expense, unhappiness, and suffering.

PRESENT-DAY TREATMENT OF UNUNITED FRACTURES OF THE NECK  
OF THE FEMUR\*

MELVIN S. HENDERSON, M.D.  
Rochester, Minnesota

UNUNITED fractures of the neck of the fe-  
...mur are more commonly encountered  
...among elderly women than among elderly men.  
...Many of the patients manage to get along well  
...enough to meet the economic and social demands  
...made on people of their age, and if so, surgical  
...measures need not be considered.

Selection of Patients for Surgical Operation

If disability and pain, further complicated by  
...social and economic conditions, make life un-

happy, surgical interference may be deemed ad-  
...visable. The surgeon, however, must be con-  
...vinced, first of all, that the patient's life expec-  
...tancy warrants the time and money to be ex-  
...pended by the patient. The surgeon must be sure,  
...also, that the operative risk as to life, infection  
...and so on, is justifiable. Organic heart disease,  
...such as myocarditis and involvement of the coro-  
...nary arteries, are distinct contraindications to op-  
...eration, and obesity, if it is at all marked, is an  
...unfavorable factor. Very rarely should a patient  
...who is more than sixty-five years of age be oper-  
...ated upon for an ununited fracture of the hip.

\*From the Section on Orthopedic Surgery, The Mayo Clinic,  
Rochester, Minnesota.

MAY, 1940

...ve does not in  
...in the Colony of  
...majority of these  
...tion to suffering  
...crease the knowl  
...e state to about  
  
...in excess of 70  
...1,200 is already  
...ve years elapse  
...e becomes avail  
...rtunate condition