

IRISH DIVISION.

THE SPRING QUARTERLY MEETING of the Irish Division was held at Portrane Mental Hospital, Donabate, co. Dublin, by the kind invitation of Dr. J. O'Connor Donelan, Medical Superintendent, on Thursday, April 5, 1934.

The following members were present : Dr. L. Gavin in the Chair ; Drs. S. Blake, P. J. Cassin, Kathleen Dillon, J. O'Connor Donelan, Patricia Daly, F. J. Deane, W. N. Eustace, John FitzGerald, P. Grace, Dorothy Gardner, B. F. Honan, D. Hegarty, D. L. Kelly, J. Kearney, R. R. Leeper, J. C. Martin, P. Moran, C. B. Molony, J. Mills, Eveleen O'Brien, E. N. M. O'Sullivan, R. Taylor, R. H. Taylor and R. Thompson (Hon. Sec.), and, as guest, Dr. E. Shanahan.

Apologies for unavoidable absence were received from Drs. S. J. Graham, J. C. Osburne, John J. FitzGerald, B. Lyons, P. J. Courtney, Dorah E. Allman, G. H. Keene, M. J. Nolan, J. F. FitzGerald, R. D. Brennan, T. A. Greene, H. R. C. Rutherford and P. J. Irwin.

Members were kindly entertained to luncheon.

The minutes of the previous meeting were read, approved and signed by the Chairman.

The following nominated candidates were, after ballot, declared unanimously elected members of the Association :

PATRICIA MARY JOSEPHINE DALY, M.B., B.Ch., B.A.O., N.U.I., D.P.H., Assistant Medical Officer, Portrane Mental Hospital, Donabate, co. Dublin.

Proposed by Drs. S. Blake, J. O'Connor Donelan and John FitzGerald.

JOSEPH O'CONNOR, M.D., B.Ch., B.A.O., N.U.I., Assistant Medical Officer, Ardee Mental Hospital, Ardee, co. Louth.

Proposed by Drs. P. Moran, L. Gavin and P. J. Cassin.

The meeting then proceeded to the election of the Officers of the Division for the year 1934-35, and the following, after ballot, were declared elected :

Hon. Secretary, Dr. R. Thompson.

Representative Members of Council, Dr. L. Gavin and Dr. J. C. Martin.

Dr. LEEPER then proposed and Dr. GRACE seconded that Dr. Gavin be re-elected Chairman of the Division. This was carried unanimously.

The Mental Nursing Advisory Committees to the General Nursing Councils were re-elected as follows :

For Northern Ireland : Drs. M. J. Nolan, Dorothy Gardner, F. J. Deane, N. B. Graham and J. Watson.

For Irish Free State : Drs. J. O'Connor Donelan, L. Gavin, S. Blake, R. R. Leeper and J. C. Martin.

Drs. Nolan and O'Connor Donelan were re-elected Examiners for the Association's Certificate in Psychological Medicine.

The following were nominated Examiners for the Nursing Certificates of the Royal Medico-Psychological Association : Preliminary, Dr. Dorothy Gardner ; Final, Dr. P. Moran ; Mental Deficiency, Dr. G. H. Keene ; Nurse Examiner, Miss Delany.

The Secretary was instructed to ask Dr. Keene to reconsider his decision to resign from the Examinership for Mental Deficiency, and, failing such reconsideration, Dr. C. B. Molony was nominated to fill the vacancy.

Dr. MORAN submitted his report of the present position regarding the contemplated Central Pathological Laboratory, and gave an account of the interview which the Sub-Committee were afforded with a Committee representing the Sweepstake Authorities.

Dr. Moran's report was discussed in detail by the members present, and, in view of the many difficult problems which might arise, it was decided to send a questionnaire relating to these problems to each member of the Division.

Dr. KEARNEY raised the question of the inadequate medical staffing of the mental hospitals. He pointed out that, excluding superintendents, the proportion of medical officers to patients was generally about 1 to 600 and, frequently, considerably less than this, and that consequently any work other than the purely routine was impossible. Dr. Donelan, Dr. FitzGerald, Dr. Gardner and others expressed complete agreement with Dr. Kearney's views. It was finally decided that a minimum ratio of medical officers to patients—exclusive of superintendents—should be 1 to 350, and that a communication embodying these suggestions should be sent to the medical superintendents of all district mental hospitals for the consideration of their committees, and that a copy of this communication be also forwarded to the Minister for Local Government.

The meeting accepted with pleasure Dr. Moran's invitation to hold the Summer Meeting at Ardee Mental Hospital, at a date to be fixed later.

Dr. EVELEEN O'BRIEN read a very interesting communication on " The Sedimentation Rate of Red Blood-Cells ". (See below.)

Dr. O'Brien's paper was fully discussed by the members present. The Chairman, in summing up the discussion, thanked Dr. O'Brien for her valuable communication, and stated that, in his

opinion, every device which could be used for the earlier detection of physical abnormality in the insane should be resorted to.

Dr. MARTIN then proposed a vote of thanks to Dr. Donelan for his kind hospitality. This was seconded by Dr. LEEPER and carried unanimously.

PAPER.—“The Sedimentation Rate of Red Blood-Cells: Its Diagnostic and Prognostic Value in the Treatment of the Physical Ailments of the Insane,” by EVELEEN O'BRIEN, M.B., B.Ch., B.A.O., D.P.M., Assistant Medical Officer, Portrane Mental Hospital.

In writing this short paper on the red-cell sedimentation rate I am, of course, aware that the test is not a new one, but considering the extreme ease with which it can be performed and the definite value of its results (when taken in conjunction with other factors) I think it is a pity it is not more widely used, more especially in mental hospitals, where all tests are particularly valuable, the patient, as a rule, having neither the wit nor the will to give any information regarding his physical illness.

The test is extremely simple, the only apparatus required being a syringe and needle for vein puncture, a freshly-made solution of 3% sodium citrate, and some form of glass tube or cylinder. Many different methods have been employed in the actual carrying out of the test, but the principle in all has been the same, e. g., to mix blood with sodium citrate solution, allow it to stand for a definite length of time, and then to measure either the height of the column of red cells below, or that of the clear fluid above; or else to calculate the time required for the red cells to fall to a certain mark.

I used ordinary graduated 10-c.c. cylinders. 8 c.c. blood was withdrawn into a 10 c.c. syringe already containing 2 c.c. of a freshly-made solution of 3% sodium citrate. (This solution must be fresh—I made it up every morning.) This mixture was then placed in the cylinder, where it reached the 10 c.c. mark. The cylinder was inverted once with a finger on top, and then put aside, and the height of the column of red cells was estimated after one hour.

It has been observed that many healthy individuals have a very slow rate of sedimentation. This is apparently of no importance, an increased rate only being of significance. For any healthy individual repeated examinations over a long time indicate that the rate is nearly constant, altered only slightly by physiological conditions, and tending to be slightly more rapid in women than in men, and less rapid in children than in adults. Zeckwer and Goodall wrote that in their series every case in which the red cells occupied less than 4.5 c.c. was one of malignant tumour, tuberculosis or large inflammatory exudate. Where the cells were between 4.5 c.c. and 5 c.c. it was highly probable that the case was one of those conditions, and that it was only in occasional cases of these diseases that the red cells occupied more than 5 c.c. They also found that the rate was accelerated in pregnancy and in anæmias. It was normal in their very small series of cases of syphilis of the central nervous system. They considered the blood to be normal where the red cells did not fall below 7.5. My results are in agreement with theirs to a very great extent.

I tested in all 400 cases. Seventeen of these were not insane patients; they were mainly nurses up for appointment and whose blood was being taken for other reasons. They were all healthy young people, and it was interesting to observe that in none of their cases did the red cells go below 8.5. I divided the remaining 383 into three divisions:

- (1) Those in which the red cells stood at or above 7.5—normal.
- (2) Those in which the red cells fell below 7.5, but were above 5.5.
- (3) Those in which the red cells fell below 5.5.

Out of the 383 patients, 347 gave readings bringing them into the first group, e. g., normal, 22 came into the second group, and 14 came into the third group. Taking this latter group first—that is, the 14 with the very low readings below 5.5—I may say at once that these cases were all extremely ill. Of the 14, 8 were cases of

active pulmonary tuberculosis, 1 had abdominal tuberculosis, 1 had an empyema following lobar pneumonia. The remaining 4 were cases of malignant disease.

The next group of 22 (reading below 7.5 and above 5.5) is the much more important, since these patients were up and about (with one exception), and were only found to be pathological in the routine performance of the test. I should like to quote three which were particularly interesting, and then give you my observations on the entire series.

One of the first patients to show an abnormal reading was a young epileptic—a stout, strong, country girl, who appeared to be in excellent health, apart from her seizures. I was quite taken aback at her reading—6.3. I examined her very thoroughly. The urine and fæces were examined bacteriologically and the Wassermann reaction was carried out, all with negative results. On looking up her notes, however, I noticed that she suffered from occasional bilious attacks. Some time later she had another attack of vomiting with nausea and abdominal pain. There was no gynaecological trouble, and though I examined her repeatedly during the attack, I failed to discover a definite cause for her illness. About a fortnight later she again vomited and had violent abdominal pain, and her temperature rose to 102°. Operation revealed an acute cholecystitis superimposed upon a chronically inflamed gall-bladder. The gall-bladder was perforated by a large gall-stone, and the latter was lying in a pocket of circumscribed peritonitis. Despite my repeated examinations I missed her cholecystitis, but the sedimentation rate at least warned me that there was some pathological process at work.

The next case was also a young girl in her early twenties. There was nothing of note in her history beyond that she had a perverted appetite—she would eat almost anything; also the facies was of a peculiar greenish pallor, but apparently she was in her normal health. Her reading was 6.9. I went through the same routine with her and had much more trouble, as she was almost completely demented. I discovered nothing, but kept her in hospital for a few days' observation. One night she complained of headache and (I happened to be in the ward at the time) she suddenly had an alarming hæmatemesis. She rallied from this, but a succession of minor hæmorrhages from the gums and mucous membranes, together with high fever, speedily terminated her illness. I made several slides in the case, but unfortunately the pathologist reported they were of no use as the stain was dead. The symptoms, however, pointed to a diagnosis of acute lymphatic leukæmia: she had the three chief symptoms of that disease, e.g., hæmorrhages, fever and anæmia.

The third case was a woman, æt. 36, fretful, complaining and hypochondriacal. She came to hospital with the signs and symptoms of influenza, which was then prevalent, and she was accompanied by several others similarly afflicted. I took blood from them all before making a physical examination, as I happened to be doing the test when they came in. They were all normal with the exception of this patient, who gave a reading of 5.6. I have said she had all the signs of influenza, but she had in addition dullness at the left base, with distant breath-sounds of a tubular quality and diminished vocal resonance. The dullness extended rapidly, and I removed about one and a half pints of fluid, underneath which were active signs of tuberculosis. She was removed to the sanatorium, and after some weeks of irregular pyrexia, settled down and did very well—mentally as well as physically. She is now a buxom, cheerful woman who does a good day's work.

I have mentioned these three cases, not to suggest that if the sedimentation be normal one may conclude there is nothing wrong with the patient, but, if it is found to be abnormal, nothing should be left undone to discover the cause. The remainder of my 36 cases were not so dramatic fortunately, but some points about them struck me as being interesting:

(1) The sedimentation rate is abnormal in that form of dysentery peculiar to mental hospitals. This surprised me, for the characteristic mucus in the motions of these cases consists chiefly of polymorphonuclear cells (from the blood), mucin (from the mucous glands), and decaying columnar cells—the latter alone coming from tissue breakdown—but I presume there is a certain amount of tissue change, cloudy swelling, etc., in the other organs resulting from the toxæmia, and, of course, in the severe cases there is actual ulceration of the bowel.

(2) The surprisingly large number of people who are up and about apparently in normal health, but who still are tubercular. I admit I find it practically impossible to diagnose early tuberculosis in the insane, their restlessness, lack of co-operation and shallow breathing being a great handicap. Several cases (in this group of 22), which from the evidence I found in the chest I considered to be in the

early stage of the disease, later came to autopsy (some through intercurrent disease), and I was dismayed to find cavitation where I had visualized tubercle formation, or, at the most, very early caseation—a painful if salutary discovery.

(3) There is increased sedimentation rate in blood diseases. Only two cases came under my observation—one the acute leukæmia I have described and another of chronic lymphatic leukæmia.

(4) Two cases had acne vulgaris of long standing but no other lesion that I could demonstrate. Whether their suspension stability was altered because of the acne or the skin trouble was just a coincidence I am unable to say. They are both alive and seemingly well, but retain their acne.

(5) I classed as neurological four patients with the post-encephalitic syndrome, one with disseminated sclerosis, and two general paralytics. The readings were all normal, with the exception of the disseminated sclerosis, whose red cells fell to 6.4. This particular case was not an inmate of the institution. She went downhill very rapidly, and towards the end manifested definite cerebral symptoms—possibly following on plaque formation in the brain.

(6) The high percentage of normal readings among the epileptics. There were 73 epileptics; of these 5 showed increased sedimentation rate: one was the cholecystitis case I have described, two had dysentery, one was tubercular, and the fifth is undergoing investigation at the moment—I think she has disseminated sclerosis.

My conclusion is that the test is decidedly helpful. It indicates that tissue breakdown is occurring somewhere in the body, though it does not say why or where. It is very helpful in estimating prognosis, more especially in tuberculosis. Many observers stress the fact that during sanatorium treatment, if the bacilli have disappeared from the sputum and the temperature and pulse have become normal, and the disease, to all intents and purposes, has become arrested, the sedimentation rate may still show acceleration. This, it is considered, shows that arrest of the disease has not been finally established, and one cannot give a good prognosis until the sedimentation test has returned to normal. In cases of malignant disease where the growth has been removed by operation it is of considerable value. I have no practical experience of such cases, but know of one in which, prior to operation, the red cells fell to a very low figure, and for some time after operation it remained at a low level; then it gradually rose until it reached normal. Such cases would be well advised to have repeated examinations over a considerable period; a falling level might be the first indication of metastases.

The test appears to be particularly useful when dealing with the insane who are physically ill and who cannot or will not supply any information or assistance. At times we have to work not only without their help, but actually against their resistance, and under such conditions we should welcome any procedure likely to aid us in diagnosis or treatment.

VISIT TO RAMPTON STATE INSTITUTION.

On April 25, 1934, under the auspices of the Mental Deficiency Committee, and at the kind invitation of the Board of Control, members of the Association visited the Rampton State Institution. The occasion produced an attendance only equalled at annual general meetings, over 120 members making the journey. They were received by Sir Hubert Bond. Dr. Rees Thomas and Miss Darwin, Commissioners of the Board of Control, and Dr. F. E. Schneider, Medical Superintendent, and were kindly entertained to lunch. The President, Dr. F. Douglas Turner, expressed the thanks of the Association to the Board and Sir Hubert Bond responded.

The following description of the institution and its activities was issued:

RAMPTON STATE INSTITUTION.

Section 35 of the Mental Deficiency Act, 1913, empowers the Board of Control to establish and maintain State Institutions for Mental Defectives of dangerous or violent propensities.

The cases for which the Board are required to provide are mental defectives who are dangerous