Duration of the Psychosis

The average duration of the mental symptoms in the twenty-six cases with recovery was ten months. In nine the duration was five months or less; in another nine between six and seven months; and in the remaining eight cases the time ranged from eleven to thirty-three months. In other words, eighteen of the twenty-six patients who recovered were well within seven months from the onset of the psychosis, and the remaining eight were ill for a much longer period.

If now the form of the psychosis is considered in relation to the duration of the symptoms, it will be seen that of the eighteen patients who recovered within seven months six were delirious, six schizophrenic, four depressive, and two excited. Of the eight who took from eleven to thirty-three months to recover six were depressive and two schizophrenic. It will be noted from this that, as has already been indicated when dealing with the different forms of psychosis, all the excited and delirious patients who recovered did so in a relatively short time, while rather more than half of the depressive patients who got well took a relatively long time. The majority of the schizophrenic patients who recovered did so within a fairly short period.

Various Other Factors

Out of the total of thirty-five cases, the mental symptoms appeared at the first pregnancy in sixteen, at the second pregnancy in eight, at the third pregnancy in five, at the fourth pregnancy in two, and at the fifth, sixth, seventh, and eighth pregnancies in one case each. Of the sixteen cases in which mental disorder was related to a first pregnancy, thirteen patients (80 per cent.) recovered; of the eight connected with a second pregnancy, five patients (62 per cent.) recovered; of the five cases connected with a third pregnancy, three patients (60 per cent.) recovered; one of the two patients in whom the mental disorder was related to the fourth pregnancy recovered; while in the four cases in which it was connected with the fifth, sixth, seventh, and eighth pregnancies respectively, all the patients made good recoveries. The small number of cases connected with the fourth, fifth, sixth, seventh, and eighth pregnancies makes it impossible to generalize, but from a consideration of the cases connected with the first, second, and third pregnancies it would appear that the chances of recovery are best in those cases in which the breakdown is associated with a first pregnancy, and the outlook is much less bright in those cases associated with the second and third pregnancies.

When the different forms of mental disorder encountered in this series of thirty-five cases (the two patients who died being excluded) were dealt with in detail it was pointed out that, in addition to the child-bearing which was the main cause of the breakdown, a number of other causal factors, either singly or in combination, appeared to play a part in the development of the psychosis. These additional factors were mentioned in each case when they were present. If the thirty-five cases are considered as a whole it will be found that in twenty-eight cases one or more additional causal factors were present, while in the remaining seven cases they were absent. Viewed from the standpoint of recoverability of the twenty-eight cases with additional factors, twenty-one (74 per cent.) recovered, while of the seven cases without additional causal factors five patients (71 per cent.) made a good recovery. The percentage of recovery is thus very similar in both groups, and the presence or absence of any additional factor in the causation of the psychosis does not seem to influence the chances of recovery to any extent.

In conclusion the writer would like to thank Dr. N. Roberts, medical superintendent of West Park Mental Hospital, for his permission to publish the details of the cases concerned.

CASE OF ALBERS-SCHÖNBERG'S DISEASE

BY

JULIUS H. KRETZMAR, M.B., CH.B.ED.

AND

R. A. ROBERTS, B.Sc., M.B., CH.B., D.M.R.E.LIVERP.

KIMBERLEY HOSPITAL, SOUTH AFRICA

(With Special Plate)

A European female patient, aged 21 years, was admitted to the Kimberley Hospital with a history of difficulty in breathing while sleeping of two years' duration and sore throats of one year's duration. The previous history given by the patient was that she had had measles, chicken-pox, and scarlet fever as a child, and that she had had much pain in both ears. Otherwise she had always been healthy.

The parents were both dead, the father having died at the age of 63 and the mother at 46 years. They were both of big stature. The patient stated that the father and mother had been cousins. A photograph of the parents on their wedding day was procured, and the parents were seen to be of huge physique, and the mother had a very broad bridge to her nose. There were three sisters and two brothers alive and well, while three sisters and two brothers had died. The patient was the youngest living child.

Clinical Examination

On examination it was seen at a glance that there was a fair degree of exophthalmos, a wide bridge to the nose, and a left-sided facial paralysis, which the patient said she had had for nine years (Fig. 1 on Special Plate). She was deaf, and while reading had to use spectacles. There was difficulty with speech, and she appeared to be somewhat sluggish mentally.

Investigation of the ears, nose, and throat revealed no abnormality in the drums, no hypertrophy of the tonsils, and no faucial abnormality. There was, however, gross swelling and oedema of the inferior turbinates on both sides, and pus could be seen passing down the nasopharynx. The condition of the teeth was good. Nothing else abnormal was noted in the buccal cavity. The nasal condition was treated by syringing with normal saline, and cleared up fairly quickly.

Routine examination of the other systems of the body did not reveal any abnormalities.

Radiological Investigation

After some time, however, she began complaining again of the same symptoms, and interest in the case quickened when it was decided to x-ray the patient's skull, in order to rule out the possibility of any infection of the sinuses. Dr. Roberts, the radiologist, was down with influenza at the time, and the workers in the radiological department reported to him that they could not get the rays to penetrate the patient's skull with the usual routine technique; with an increase of the intensity and exposure a very interesting state of affairs presented itself. It was then decided to take x-ray films of the entire skeletal system.

The results shown in the films of the different bones and the clinical and biochemical data made us come to the conclusion that we had discovered a case of Albers-Schönberg's disease.

The condition being one where excessive deposits of calcium are found in the bony skeleton, the urine and blood were both examined by the Medical Research Institute in Johannesburg.

Biochemical Data

The report on the urine was that it was pale amber in colour and slightly turbid; the specific gravity, 1007; the reaction was acid; albumin was absent; and the specimen showed re-

ducing properties, which may have been due to the chloroform present (for preservative action in transit). The calcium content was 36 mg. per 100 c.cm. There were no other features.

The report on the blood was 9.5 mg. calcium per 100 c.cm., which is within the normal limits.

A blood count was taken, and showed red blood cells, 5,000,000, white blood cells, 6,000. There was no poikilocytosis, and no nucleated red cells were visible.

X-Ray Reports

The following is a detailed report of the radiological appearances of the different bones.

Skull.—All the bones of the cranium show increased calcium; moreover, their thickness is greatly increased—in the occipital region to over one inch. The mastoid cells are obliterated. The pituitary fossa is very irregular and cannot be well defined. There is a suggestion of calcification within the fossa, apart from the expansion of the sphenoid shadow. In the lateral view the nasal sinuses show moderately well. There is increased calcium deposit in the orbital fossa sufficient to account for the exophthalmos present. Both the upper and the lower maxillae are increased in density and thickness. The teeth appear to be well preserved.

(The exposure required 15 kilovolts more than used in normal routine.)

Spine.—In the antero-posterior views the vertebral bodies are of normal shape but of evenly increased density. In the lateral views the increased density is seen to be more pronounced at the upper and lower aspects, with cancellous tissue showing in the centre.

Ribs (Fig. 2).—The ribs are increased in density and thickness, but cancellous tissue can be shown. (The twelfth rib on the left side is absent.)

Clavicles (Fig. 2).—These are notably thicker than normal, and their density obscures any cancellous tissue.

Pelvis.—There is a uniform increase in density, but no abnormality of outline. The epiphyses of the iliac crests have not united.

Femora, Tibiae, and Fibulae.—There is a general increased density, though cancellous tissue is shown. There is increased thickening of the diaphyses, but no definite clubbing of the metaphyses.

Patellae.—These are within the normal limits.

Humeri, Radii, and Ulnae (Fig. 2).—These show the same changes as the femora, tibiae, and fibulae.

Scapulae.—These are increased in density, but the outline is within the normal.

Tarsus.—There is increased density, more marked at points of stress.

Metatarsus.—There is some increased density, but cancellous tissue is shown. The diaphyses instead of being biconcave tend to be biconvex.

Phalanges of Feet.—Practically within the normal.

Carpals (Fig. 3).—General increase in density, but no abnormality of outline.

Metacarpals (Fig. 3).—General increase in density, but cancellous tissue is seen. Diaphyses biconvex instead of biconcave.

Phalanges of Hand (Fig. 3).—Similar to metacarpals.

Commentary

There are certain features in this case where the radiological appearances and some of the clinical findings are at variance with those recorded in the literature, and others, again, that have not been mentioned before. In our case there is the difference in the intensity of bone structure of the different bones in the skull—for example, the occipital bone, which in parts is more than one inch in thickness. There is also visible here a definite deformity in the outline of the pituitary fossa, which appears to be irregularly deepened and increased in capacity.

Another feature not noted in the literature before is the presence of exophthalmos, there being in this case sufficient increased calcium deposit in the frontal areas of the skull to account for the degree of exophthalmos manifested. In this case no optic atrophy could be made out, there being no abnormality of the fundus oculi and the optic disks. Whereas dental caries is described as a concomitant feature of this condition, we found that the dentition in this patient was quite good.

No mention has been made in the literature of the clavicles, which we found to be very wide and dense. There was also a difference in the appearance of the metatarsals, metacarpals, and phalanges of the hand. Instead of showing a concavity in their outline they showed a convexity. There was also complete absence of those features in the phalanges of the hands as described by Brailsford.

Whereas a progressive anaemia is described as a feature in this condition, this case, on the contrary, showed a good blood picture. There was a negative Wassermann reaction of the blood. An additional feature put forward in this clinical entity is consanguinity of the parents, who were cousins.

The rest of the family are scattered over distant parts of the country, and we were able, therefore, to examine only one brother and one sister. There are, however, no features in their cases simulating the condition in their youngest sister.

Similarity of so many of the clinical, biochemical, and radiological phenomena in this case with those described as found in Albers-Schönberg's disease makes us feel that there is no doubt about this being another of these rare cases.

We wish to express our thanks to Dr. Norman Weinberg for his permission to publish this case.

INSERTION OF THE SMITH-PETERSEN NAIL INTO THE FEMORAL NECK

BY

H. A. BRITAIN, M.Ch., F.R.C.S.

ORTHOPAEDIC SURGEON, NORFOLK AND NORWICH HOSPITAL

(With Special Plate)

Progress in surgery consists to some extent in rendering difficult operative procedures easier to perform. It is claimed that the following technique of introducing the Smith-Petersen nail into the fractured neck of the femur fulfils this requirement, since it is simple enough to eliminate the necessity for considerable operative skill on the part of the surgeon, and requires no elaborate instrumentarium.

I have been dissatisfied with the results of the open operation in my hands during the last three years, not only because of its limited application, but for the following reasons:

1. Complete reduction by open operation is not by any means certain. It is difficult to expose the fracture sufficiently for the human eye to see it in both the antero-posterior and lateral planes at once, and most surgeons have been disappointed with the x-ray photographs of an apparently complete reduction on the table.

2. The operation is a difficult one, and undoubtedly carries a certain mortality. Accurate reduction is not sufficiently essential to necessitate the risk of a patient's life. A position of slight coxa valga will give a painless weight-bearing limb, provided that bony union takes place.

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FIG. 1.—Female, aged 21 years. Note the wide separation of the eyes, indicating some degree of hypertelorism, the prominence of the nasal bone, the left-sided facial paralysis, and the massive lower jaw.

FIG. 2.—Female, aged 21 years. Radiograph of left chest and left humerus. The structure of the humerus illustrates the thickening of the cortex and the relatively small size of the medullary canal.

FIG. 3.—Female, aged 21 years. Radiograph of hand. There are appreciable alterations in the outlines of the metacarpals as the result of the cortical thickening.

RUBY O. STERN, J. McLEMAN, AND B. F. M. BOND:
DIAGNOSIS OF PHYSICAL DISORDERS IN THE INSANE

FIG. 1.—Photomicrograph of section from frontal region of cerebral cortex of Case I, showing a miliary abscess round a blood vessel in the grey matter.

FIG. 2.—Photograph of kidneys from Case II. The small amount of kidney tissue present at the upper pole of left kidney was the only recognizable kidney substance in the two organs.