SUMMARY

The systolic blood-pressure readings show that after the first injection there was a fall of 26 mm., and after the second a fall of 28 mm. In both cases the maximum fall was recorded after six hours. These falls in the blood pressure were accompanied by a marked clinical improvement, the patient becoming much less drowsy. The mode of action of the magnesium sulphate is difficult to determine. The quantity of magnesium used is insufficient for the radicle to exercise its sedative action to any appreciable degree. The explanation advanced by Blackfan and Hamilton is that the rise in blood pressure and the uraemia symptoms are due to oedema of the brain. They suggest that this oedema of the brain is reduced by a change in the osmotic relationship between the blood and the tissues of the brain, such as is supposed to occur when salt solution is injected. This change, they suggest, may be due to an increase in the total electrolyte content of the blood. The series described by Blackfan and Hamilton contained no cases of scarlatinal origin ; hence it is interesting to note that this case also responded to the treatment. In view of the frequency with which uraemia causes a fatal termination in scarlatinal nephritis, this treatment would seem to offer a useful method of warding off a fatal uraemia until resolution of the nephritis occurs.

I wish to thank Dr. W. T. Benson for permission to publish this case.

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PELVIMETRY BY *X* RAYS

No originality is claimed in arriving at measurements of the true conjugate and transverse diameters of the bony pelvis, but a simple account of the following method may interest those who have not yet tried it.

Antero-posterior and lateral films are taken with centring respectively one and a half inches above the os pubis and just before the great trochanter. Using 20 mA. and doubly screened films, exposures of four and seven seconds respectively are made at 80 to 100 kV. on the Potter-Bucky. It is then necessary to measure the thickness of the patient from pubes to table (a), and her extreme width across the trochanters (b). Let the focus-film distance be 28 inches (c). On the antero-posterior film the transverse diameter is measured (d), and on the lateral film the distance from the sacral promontory to the back of the os pubis (e). The calculation is as follows:

$$\frac{d \times (c - \frac{3}{4}a)}{c} = \text{true transverse diameter}$$

$$\frac{e \times (c - \frac{1}{2}b)}{c} = \text{true conjugate diameter}$$

An actual case may be cited to dispel any doubts as to the ease and simplicity of the method.

Thickness of patient	8 inches	(a)
Width of patient	14 ,,	(b)
Focus-film distance	28 ,,	(c)
Transverse diameter measured on film	6½ ,,	(d)
Conjugate diameter measured on film	5¼ ,,	(e)

$$\frac{6\frac{1}{2} \times (28 - [\frac{3}{4} \text{ of } 8])}{28} = \frac{6\frac{1}{2} \times 22}{28} = 5.26 \text{ true transverse}$$

$$\frac{5\frac{1}{4} \times (28 - [\frac{1}{2} \text{ of } 14])}{28} = \frac{5\frac{1}{4} \times 21}{28} = 3.94 \text{ true conjugate}$$

Or approximately 5¼ and 4 inches.

Tests on the skeleton show an accuracy to within one-twelfth of an inch.

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British Medical Association

CLINICAL AND SCIENTIFIC PROCEEDINGS

FIFE BRANCH

INSANITIES ASSOCIATED WITH CHILD-BEARING

At the first sessional clinical meeting of the Fife Branch, held at the Fife and Kinross District Asylum, on November 12th, with Dr. JAMES ORR (St. Andrews), president of the Branch, in the chair, Dr. WILLIAM BOYD, medical superintendent of that institution, delivered an address on the insanities associated with child-bearing.

Dr. Boyd said that insanity as a whole was much more common in the male than in the female. Between the ages of 20 and 35, however, it was more frequent in the female, owing to the insanities attributable to reproduction, which accounted for 8 to 10 per cent. of all types of insanity met with in the female sex. Four groups of child-bearing insanities could be defined—namely: the insanity of pregnancy (20 per cent.) ; lactational insanity (30 per cent.) ; and the insanities of parturition and the puerperium, which together amounted to 50 per cent. No form was peculiar to the reproductive period, but a definite group could be recognized, because the clinical picture was so clearly coloured by the reproductive process ; in the majority of cases there was a toxic basis. In addition to child-bearing, certain other factors were present to determine the breakdown: psychopathic or neuropathic heredity ; age ; exhaustion (including haemorrhage, frequent pregnancies, and instrumentation) ; change in blood pressure ; illegitimacy ; emotional stress ; auto-intoxication ; septic conditions ; and endocrine disturbances.

Insanity of Pregnancy

Here the early symptoms were an accentuation of the "longings" of neurotic women, with irritability, excitability, and absurd and extravagant tastes. Sleeplessness was an important factor, and the patient became restless and over-anxious. Morning sickness was excessive, and delusions were present. She refused food, expressed dislike of her husband, and became apathetic and careless, neglecting the household duties. The physical signs were those of melancholia, an important point being constipation ; since these patients did not complain of pain, a look out must be kept for retention of urine, oedema of the legs, and the development of varicose veins. The course of the disorder depended on the time of onset. If it began before the fourth month, recovery was usual at the time of quickening. If it appeared after the fourth month, the insanity continued for several months after birth. The prognosis was good in the early months, but less favourable in the later months, the insanity persisting in one-third of the cases. The treatment was that for melancholia, and included rest, dieting, and measures directed to the correction of constipation and insomnia. Refusal of food called for forcible feeding, and any physical symptoms should be dealt with ; premature delivery was not indicated. The possibility of suicide was an important consideration, and all modes of suicide must be anticipated and prevented.

Insanity of Parturition

This appeared as a state of delirium or acute mania ; hallucinations were present. The treatment was delivery without delay and maintenance of the blood pressure. In puerperal insanity the patient was excited, noisy, and

restless, singing and shouting. She refused food; insomnia was constant, and hatred was displayed for the husband and nurse. Hallucinations of sight and hearing developed; remissions were not uncommon, but the excitement always returned. The physical signs were those of an infective condition, and complications were likely to occur, such as breast abscess, pyelitis, and cardiac failure. The course taken by this form of insanity depended on the severity of the attack. If the health improved, the excitement subsided in a few weeks, recovery ensuing in a month or two, after a state of apathy. There was some danger of the occurrence of prolonged subsequent weakmindedness. As regards diagnosis, the possibility of puerperal fever had to be remembered; it would be indicated by a high temperature, rigors, and suppression of the lochia. The prognosis depended on the time of onset; the earlier the onset the better would be the prognosis. In delirious forms the outlook was bad, and the majority of patients died. Treatment comprised attention to the symptoms and guarding against complications. Sedative drugs were required to allay the excitement, and drugs to raise the blood pressure were often beneficial. Puerperal insanity had a medico-legal interest; insane mothers might be delivered unconsciously and injure their children accidentally.

Lactational Insanity

This usually commenced during the third or fourth month after delivery. The patient became irritable, restless, and sleepless, and developed ideas of persecution, directed towards the husband and child. The majority of cases were of the subacute melancholic type, and ideas of unworthiness were expressed. Suicide and infanticide were common. In cases of exhaustion the patients were confused and hallucinated. The physical signs were those of melancholia, and constipation was constant. The patients were anaemic and debilitated, and loss of appetite was frequent. The disorder usually persisted for some months, but the prognosis was good in the depressed cases, though the disorder ran a long course. In acute delirious forms the prognosis was bad, the patients dying from broncho-pneumonia or acute broncho-pneumonic tuberculosis; improvement often occurred when menstruation returned. The treatment was that of melancholia: rest was essential, and breast-feeding must cease. Attention should be given to the insomnia, diet, and bowels. General tonics should be administered in the form of the scale preparations of iron, and guard should be maintained against suicide and infanticide. Glandular therapy was worth trial in the exhausted types. The toxaemia should be attacked by ensuring regular habits of feeding, defaecation, and micturition. The diet should contain an excess of fat and fruit juice. The bowels required constant attention, the best treatment being a course of calomel, with daily colonic lavage.

Although these were the common types of disorder encountered during child-bearing, other mental disorders might appear, precipitated by the stress so incurred. The chief of these were paranoia, dementia praecox, and general paralysis of the insane. In these child-bearing insanities the question of certification and admission to an asylum might require consideration, but this really depended on the home circumstances. In the insanity of pregnancy an attempt might well be made to treat the patient at home in view of the possibility of a stigma being attached to the child. The patient would, however, require to be dealt with by a nurse trained in mental disorders. The risk of suicide was always present, and in the case of the poorer patients suffering from these insanities there were no facilities other than those offered by the asylum.

Reports of Societies

OBSTETRICS AT THE ROTUNDA

At a meeting of the Section of Obstetrics and Gynaecology of the Royal Society of Medicine on November 20th, with the president, Mr. VICTOR BONNEY, in the chair, Dr. BETHEL SOLOMONS read a paper on methods of obstetric diagnosis and treatment at the Rotunda Hospital in 1909 compared with 1929.

Dr. Solomons stated that he had now been Master of the Rotunda since 1926, and it was therefore possible to review dispassionately the new ideas, to compare them with the old, and to endeavour to sum up the best of each. During that time he had had the opportunity of studying the results of over 20,000 labours. In 1909, there were two labour wards with stone floors, which were used on alternate weeks. These wards were small and inconvenient for teaching, but there was an undoubted value in being able to give each theatre a rest for thorough cleaning. The bigger theatre now in existence was of very great value from the teaching point of view. Dr. Solomons went on to discuss certain technical points in midwifery. He first dealt with fixation of the foetal head in primigravidae. He found that in 19.5 per cent. of all such cases the head was not fixed in the pelvis at the time labour started, and of these, 75 per cent. delivered themselves spontaneously, and resulted in a normal live child. In 10 per cent. delivery was effected by forceps, and in the remaining 15 per cent. more serious operative treatment was necessary, including lower segment Caesarean section. He spoke enthusiastically of this method, and considered it superior to the higher incision. He next discussed the question of pelvimetry and disproportion. In 1909 he relied almost entirely on the Skutsch pelvimeter, and he still thought that this instrument was of considerable value; on the other hand, if time and place permitted, radiographic pelvimetry gave the best results. During the twenty years under discussion the number of cases of disproportion had increased enormously, and he found it rather difficult to give any satisfactory explanation. It might be due to the present generation having been affected by malnutrition and other factors during the great war.

As regards the third stage of labour he had come to the conclusion that more harm than good was done by controlling the fundus. The danger lay in the assistant being over-anxious, and liable to produce hour-glass contraction and other abnormalities, by constant manipulation. Next he referred to the toxaemias of pregnancy and accidental haemorrhage. The incidence of accidental haemorrhage had increased from six in 1909 to forty-one in 1929, and he was at a loss to understand it. He had entirely given up plugging the vagina for this serious complication, and relied on puncture of the membranes, repeated doses of pituitary extract, and treatment of collapse by salines when necessary. On the question of inducing labour, he professed himself a convert to the method of puncture of the membranes, and was in entire agreement with other authors, including Guttmacher, Douglas, Jackson, and FitzGibbon. In the treatment of inertia watchful expectancy was necessary, and he taught the complete abolition of oxytocic drugs such as pituitrin. In his opinion the pendulum had swung too far in the avoidance of forceps, but the use of Kielland's instrument was dangerous, as it suggested meddlesome midwifery. When the head was low the obstetrician should use the instrument to which he was accustomed. Referring to the lying-in period, he stressed the importance of patients sitting up in order to obtain the best drainage of the pelvis. Finally, on the question of the teaching of students, he was of the opinion