INSANITY AND ITS RELATION TO THE PARTURIENT STATE.*

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In acquiescing to Dr. Leeper's request that I should produce something for this Meeting, I thought that the best subject would be the relation of insanity to the parturient state. It is interesting to find that the description of the symptomatology of this disease only dates from 1875, when Fürstner (1) first described it.

General Consideration of Insanity.

(*a*) *Puberty*.—It may seem strange that this subject should be brought up in this connection. The girl at puberty *must* be told that menstruation is a normal function of the body, and that she may carry on her usual occupation and pastimes during menstruation. Many girls have been frightened to such an extent by the presence of the blood that a condition approximating insanity has been observed by the writer. The connection between a calm onset of puberty and future pregnancy is obvious.

(*b*) *Marriage*.—Somewhat the same remarks apply to the question of marriage.

Although it may seem unnecessary to many at the present day, it *is* definitely necessary that the married state should be explained if mental trouble is to be avoided. Too often a woman continues to suffer for years from dyspareunia due to stenosis of the vagina, when a timely visit to the gynæcologist would allow a cure to be effected in a condition which might otherwise terminate in an asylum. The question is sometimes put whether a girl should marry when insanity is present in the family. The writer's experience is that she will marry, no matter what the answer given may be. It seems wiser, however, that marriage should be avoided in this type of case. When considering this problem, the question of "cousins' marriages" arises. In an investigation made by the writer some years ago, he found that insanity and other abnormalities did not

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occur more often in the marriage of cousins than in other marriages, unless the "inbreeding" continued in the next generation.

Pregnancy.—If a woman, who has been insane or in whose family there is a history of insanity, gets married, should she become pregnant? The answer in the former is definitely in the negative; in the latter—it is wiser not.

Statistics of Insanity.

Statistics with regard to insanity are not easy to get; so rarely does it occur in maternity hospitals that by at least one hospital from whom inquiry was made, the answer was given "that a note of this condition had not been kept." The number at the Rotunda varies between 1 and 6 in the year, and an investigation over a long period of years demonstrated 81 cases in 54,000 labours, *i.e.*, approximately 0·15%.

At Queen Charlotte's Hospital there were only 9 cases in five years, 1926–1930. Ætiological factors were ascertained in three, two of whom had sepsis, one severe albuminuria. None of these cases recovered while in the hospital. As there were 10,730 births at Queen Charlotte's Hospital during this period, the incidence was 1 in 1,192, or 0·08%.

With regard to statistics of other places, the writer is much indebted to Dr. Donelan, Chief Superintendent of Grangegorman Asylum, for the information which is best seen in the following table:

	Insanty cases admitted.	Puerperal insanity cases admitted.	Recovered.	Died.	Relieved, not improved.	Remaining on register.
1928	220	10	4	2	3	1
1929	241	10	6	2	—	2
1930	233	15	7	4	—	4
Total	694	35	17	8	3	7

The percentage of cases of puerperal insanity to all cases of insanity admitted was, therefore, 5.

It is interesting to compare these figures with those obtained by Sir Robert Jones (3) in 1903. He stated then that the percentage-rate was 6·4 in the private class and 8·1 in the poorer classes to the total average admissions from all causes.

On inquiry from the Registrar-General for the Free State I was informed that I had applied to the wrong place, but the Registrar-General, to whom I am deeply indebted, procured for me the following information:

	Number of births in Free State.	Number admitted to mental hospitals.
1928	59,176	58
1929	58,280	51
1930	58,274	53
Total	175,730	162

That is a percentage rate of 0·09 of puerperal insanities to the complete number of births. Berkeley (4) found, in 1878–82, that 1 in 1,950 parturients were sent to mental hospitals—a percentage-rate of 0·05.

These figures cannot be taken as infallible, for there must be many patients kept at home by relatives unwilling to allow them to enter a mental hospital.

Causes of Insanity.

The various causes of puerperal insanity, as suggested by different authors, may be indicated as follows:

(1) Heredity.
(2) Previous insanity.
(3) Epilepsy.
(4) Illegitimacy.
(5) Fear from previous difficult labour.
(6) Mental disturbance, such as worry, probably starting as hysteria.
(7) Primiparity.
(8) Dystocia.
(9) No cause discernible.
(10) Toxæmia.
(11) Chorea.
(12) Sepsis.

Heredity should hold a high place in the list, but a careful inquiry into cases met with by the writer in hospital and private practice failed invariably to elicit any heredity factor; perhaps those with histories do not marry often.

The woman who has been insane in a previous confinement is strongly advised not to become pregnant again; when she does she is supposed to be liable to recurrence. There has been no case of this kind encountered.

Epilepsy with labour sometimes ends in insanity.

Illegitimacy has become so much more common in recent years that it does not seem to worry the patient at all in most instances. Illegitimates from the Rotunda will not worry the alienist. The fear of labour arising from a previous difficult confinement should

not affect the patient if she is psychologically treated by the obstetrician in the pre-natal period, and this remark also applies to "mental disturbance arising from worry." The primigravida is not more prone to insanity than the multipara—although this has been suggested—nor does dystocia affect the issue. Indeed, one of the well-known remarkable facts about dystocia is the speed with which the severe pain is forgotten.

In many cases in my experience there is no cause discernible.

We now come to a group of diseases which are very definite obstetrical factors in the causation of insanity—the toxæmias, sepsis and chorea. In a search of the hospital records these three emerge as winners in the race. Following a severe eclampsism or eclampsia, a patient is very apt to get a cerebral hæmorrhage, or at any rate to suffer from cerebral irritation; accompanying these symptoms are usually a high degree of albuminuria and a systolic blood-pressure raised to 190–240 mm. Hg. I have lately been converted to the necessity for a close observation of the blood-pressure, and while I was brought up on the futility of venesection, I have become convinced of its excellence, and now take 8 or 10 oz. if the blood-pressure is 180 mm. Hg. or over. Success has followed this treatment.

Melancholia or mania may occur about the end of the first week of the puerperium in this type of case.

Unfortunately the end-result of a severe attack of septicæmia is sometimes insanity, and we have observed patients for whom much treatment was necessary develop mania just at the time when recovery from the primary disease was occurring. While the cerebral condition may be said to account for the occurrence in the toxæmic patient, it is difficult to state the causal factor in sepsis unless the necessary interference, such as intravenous and other medications, may be held responsible.

Chorea is too rare a condition to generalize about, but it is a fact that some form of insanity sometimes follows its occurrence in the puerperium.

Symptoms.

I do not intend to say much about symptoms in a gathering where the majority know far more than I do. Suffice it to say that the obstetrician is rather at sea when symptoms of melancholia or mania arise in the maternity hospital, and it is for the alienist to deal with the condition. These symptoms usually occur in the first two weeks of the puerperium at latest and suicidal

tendencies are common. According to Berkeley, the age-incidence is 25–29 except in the lactation variety, when it is 30–34. The onset is gradual in the melancholic form, starting with a growing moroseness, while in the maniacal variety the onset is very sudden. The general appearance is that of the pyretic patient, with sordes on the lips and tongue; there is nearly always a rise of temperature.

Varieties.

The varieties which we treat are melancholia and mania occurring in pregnancy, labour, puerperium or in the lactation period, the last being any time two weeks after labour.

Jones says that melancholia is more common than mania in pregnancy, but that puerperal mania is seen more frequently than melancholia. In the lactation period mania is more usual. In Hoppe's (5) well-known investigation of a hundred cases he found the following:

Acute confusion	63
Melancholia	11
Periodic insanity	11
Mental disturbance with hysteria	7
Paranoia	5
Epilepsy	1
Dementia paralytica	2

Treatment.—So far as the obstetrician is concerned, he can only ensure the thorough nursing of the patient, especially with regard to the prevention of self-injury. Large doses of bromide with morphine and hyoscine have been our sheet-anchors. Removal to a mental hospital when the disease is definite is imperative, as it is quite impossible to nurse these cases in a maternity hospital. The preventive treatment has already been dealt with.

With regard to recovery, this depends to a large extent upon the doctor in charge. If I may be excused for boasting, may I say that our alienists in Dublin, headed by our worthy chairman, obtain the most wonderful results? It is interesting to read in the Grange-gorman statistics, already referred to, that in 35 cases there were 17, or nearly 50%, cured, 3 relieved or not improved, 8 died, and 7 remaining on the register have still a chance.

According to Hoche (6), 40% recovered, 30% remained insane and 30% improved. Lewis gives 80% recoveries, and this is more in accordance with my experience.

The time which recovery takes varies considerably. Six months is an average time.

Typical Cases from the Rotunda.

I do not intend to give details of every case of insanity which has occurred during recent years—merely a few types.

(1) M. K—, æt. 30, 5-para, March 17, 1927: Some post-partum hæmorrhage. Fourth evening melancholia. Sent to Grangegorman.

(2) G. G—, æt. 39, 5-para, June 13, 1927: Mania from seventeenth evening until discharge to Grangegorman. Confinement normal.

(3) M. E. M—, æt. 34, 4-para, September 29, 1927: Melancholia after puerperal eclampsia. Recovered before leaving hospital.

(4) L. D—, æt. 33, 1-para, November 13, 1928: Mania in pregnancy, admitted violent. Albuminuria present; eclampsia developed; irregularity of pupils with extreme strabismus. Fits continued unabated (31 altogether). *Mors.* The *post-mortem* examination revealed the case to be a very typical eclampsia. The superficial veins of the brain were distended. A few small scattered areas of hæmorrhage on the base, especially on the undersurface of both temporal lobes. Subcortical hæmorrhage, the size of a pigeon's egg, on left temporal lobe.

(5) M. W—, æt. 34, 7-para, December 22, 1927: Induction of labour because of pregnancy melancholia. Baby normal. Transferred to Richmond on eighth day.

(6) C. F—, æt. 22, 1-para, May 12, 1928: This patient was in a mental hospital until November, 1927. No recurrence at labour or puerperium.

(7) J. M—, æt. 37, 9-para, May 27, 1928: Previous history of encephalitis lethargica 1920, since when patient has had four live children. Admitted over term. Spontaneous birth was followed by puerperal sepsis. Transferred to Grangegorman. Returned on July 30, 1928, quite sane enough to apologize for having been insane.

(8) S. K—, æt. 25, 3-para, May 7, 1929: Epilepsy-eclampsia-mania. Subject to fits for some years before admission. Previous pregnancies ended normally. Mania before birth, *epileptic* fit; cyanotic; treated as eclampsia, but it seemed both were present. Infant had three fits on delivery. Lumbar puncture: Cerebro-spinal fluid under pressure. Eyes normal. Sent to Grangegorman. Blood-urea 21 mgrm. %. Toxæmia tests negative. 73 fits.

(9) K. K—, æt. 36, 8-para, June 7, 1929: Chronic delusional insanity. Mental for some months. Quite docile. No albumen. Had had myoma and ovary removed. Discharged normal.

(10) M. McN—, æt. 30, 4-para, June 9, 1929: Chronic delusional insanity. Sent up by doctor, who attended patient in acute mania. During this pregnancy a boy was burnt to death. Depression-insanity. On admission screaming when under treatment for eleven days, and still mental. Induction. Spontaneous birth. Grangegorman eighth day.

(11) E. D—, æt. 23, 4-para, July 2, 1929: Attempted suicide with lysol.

(12) M. F—, æt. 22, 1-para, January 5, 1929: Post-rheumatic chorea gravidarum; mitral disease; mania. *Mors.* Patient had been treated with bromide, etc. On admission patient was wasted and cyanotic. Impossible to undress her. Hyoscine. Pulse 170; acute mania. Morphine and hyoscine repeated; decompensation followed; cyanosis. Section ruled out because of bronchitis; decided to continue with hyoscine and morphine; to induce by tents. Patient had temporary periods of consciousness. Septic submaxillary glands and septic throat. No sedatives could be given by mouth or rectum. Restlessness; morphine, intravenous mag. sulph. and hyoscine. Spontaneous delivery after induction. Three days later recurrence of mania. Hyoscine gr. $\frac{1}{50}$. Movements very intense and uncontrollable. Swallowing inco-ordinate. Incontinence two days before death on seventh day. Presystolic murmur. On all days hyoscine only drug useful.

Conclusions.

(1) The description of the symptomatology of puerperal insanity dates only from 1875.

(2) An investigation of 54,000 cases of labour at the Rotunda Hospital revealed 81 cases of insanity, *i.e.*, 0·17%.

(3) At Grangegorman Asylum the percentage-rate to all cases of insanity was nearly 5.

(4) The number of cases of insanity to the number of births registered in the Free State in the three years 1928, 1929 and 1930 was 162 to 175,730, *i.e.*, 0·09%.

(5) Venesection should be employed in cases of high blood-pressure, in order to avoid cerebral symptoms.

(6) Toxæmia, sepsis and chorea are probably the chief predisposing factors in puerperal insanity.

References.—(1) Furstner, *Arch. für Psychiat.*, 1875.—(2) *Rotunda Hospital Reports.*—(3) Jones, *Journ. of Obstet. and Gynæcol. B.E.*, iii, 1903, p. 109.—(4) Berkeley, *A Treatise of Mental Diseases*, London, H. Kimpton, 1901.—(5) Hoppe, *Arch. für Psychiat.*, xxv.—(6) Hoche, *ibid.*, xxiv.