

On opening the abdominal cavity the small intestines were found arranged in transverse coils, the free surface being much congested, and presenting indications of inflammatory action. The mesenteric surface was less congested; the mesentery, which was infiltrated with serum, was of pulpy consistence, and easily torn. The transverse colon was much contracted about its middle; the descending colon was also contracted, the walls being much thickened. On raising the coils of the small intestine about twenty inches from the ileo-cæcal valve, a strong, cord-like adhesion, an inch and three quarters long, attached the ileum to the brim of the true pelvis. A loop of the ileum betwixt this attachment and the termination of the small intestine had fallen into the cavity of the pelvis, and, by twisting upon itself, was prevented by this adhesion from being freed. A strangulation of the gut was thereby effected, and the passage through the intestine stopped. The strangulated loop did not contain much solid matter, but was distended with fluids.

"The case," says Dr. Ritchie, "presents for consideration the frequent attacks of colic, the cord-like adhesion, and the coexistence of delusions of a particular kind with inflammatory adhesions of the intestines. There can be little doubt that the attacks of 'colic' must have depended on the same cause (though to a less extent) as that which at last ended fatally. That they depended upon the adhesion occasioning temporary obstruction cannot be doubted. The adhesion was strong and dense; there was no other, and it must have existed for years. The probability is, that this fibrous peritoneal cord had been formed previously to 1843, and had existed without occasioning any serious inconvenience for nearly twenty years. At last, however, the intestine had got so situated that, whilst fluids could pass readily into the portion of bowel which formed the loop, there was no passage out of it, and hence was excited the inflammation which terminated in a fatal result."

*The Pathological Relation between Albuminuria and Puerperal Mania.*

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(*Edinburgh Medical Journal*, May, 1863.)

"Medical science," says Dr. Donkin, "is indebted to Professor Simpson for having first directed attention to the coexistence of *albuminuria* and *puerperal mania*, in a contribution to the Obstetric Society of Edinburgh, in 1856.\* In this paper Dr. Simpson contented himself with demonstrating merely the frequent coexistence of the

\* *Edin. Med. Jour.*, vol. ii, p. 766.

two morbid conditions, without attempting to explain the exact pathological relation between the renal and mental affections, leaving that to be accomplished by future clinical investigation. Dr. Simpson's communication is, I believe, up to the present time, the only contribution we possess on the subject, either in our own or any other language."

Dr. Donkin divides puerperal mania into the two following classes, on the distinctive features of which he strongly insists :

"*Class I.*—The mania is essentially acute, and runs a brief course; it is always accompanied by a very rapid pulse, sthenic or asthenic, and generally a moist skin. The attack is usually ushered in and attended for some time by pain and heat of head, great intolerance of light, sound, or of any movement in the room, tinnitus aurium, and pervigilium. There is a strong tendency to a fatal issue, death taking place by way of coma or asthenia.

"*Class II* is characterised by complete absence of constitutional disorder; the pulse retains, or occasionally exceeds very slightly, its natural frequency. There is no danger to life, but the mental derangement is generally more or less chronic, and frequently merges into permanent hopeless insanity."

"*What constitutes,*" asks Dr. Donkin, "*the differential pathology between them?*" Those cases referable to the 'non-constitutional' group, which are dangerous only to reason and not to life, we can readily understand. They are neither more nor less than cases of ordinary insanity, excited, in females predisposed hereditarily or otherwise to the disease, by causes incidental to parturition, such as nervous shock, hæmorrhage, exhaustion, and a variety of other causes which it would be tedious and unnecessary to enumerate. But what are we to understand by the other acute constitutional and fatal class? There is undoubtedly something *special* in their pathology which has not been explained. They have been described by some authorities\* as instances of cerebro-meningeal inflammation or phrenitis. But this interpretation of their nature is no longer tenable, owing to the fact that in no single fatal case have the traces of congestion or inflammatory action been detected in the brain or its membranes; so that Dr. Tyler Smith† correctly observes, that 'the pathological lesions found after death from puerperal mania do not throw any great light upon the essential nature of the disease. No constant morbid changes are found within the head, and most frequently the only condition found in the brain is unusual paleness and exsanguinity. Many pathologists have also remarked upon the extremely empty condition of the blood-vessels, particularly the veins.' Now, this fact is the more remarkable, because the most dangerous and rapidly fatal cases are those whose

\* Rigby, 'Syst. of Mid.,' p. 302.

† 'Man. of Mid.,' p. 492.

symptoms simulate most closely those of inflammation of the brain and its membranes. These are the cases which Dr. W. Hunter had in view when he stated in his lectures, long ago, that 'when puerperal females are out of their senses with fever like paraphrenitis, they will in all probability die.\*' Dr. Gooch,† referring to the relation between the rapidity of the pulse and the fatality of the disease, pointed out that the frequency of the pulse is the only sure guide in forming a prognosis, and illustrated his observations by showing that 'his cases which terminated fatally were all attended with a rapid pulse, while none of those with a slow or moderately excited pulse died.' Subsequent experience has fully corroborated the accuracy of this opinion.

"Now, the object I have in view in offering the following observations on this important pathological question, is to demonstrate that the acute dangerous class of cases are examples of uræmic blood-poisoning, of which the mania, rapid pulse, and other constitutional symptoms, are merely the phenomena; and that the affection, therefore, ought to be termed uræmic or renal puerperal mania, in contradistinction to the other form of the disease."

Dr. Donkin relates a long and interesting case of acute puerperal mania, in illustration of this theory of the pathology of his Class I of puerperal mania. From the anasarca preceding labour in this case, and from the albuminous urine with low specific gravity, and yet with an absence of all fibrinous exudation, which was observed the second day after delivery, Dr. Donkin argues that the morbid condition of the urinary secretion resulted from passive congestion (from mechanical compression) of the renal veins. He further traces the maniacal symptoms to the circulation of urea in the blood consequent on this state of passive congestion of the kidney. "That *uræmia* (he says) was the *second* link in the chain of morbid changes in this case is evident from the low density and albuminous condition of the urine at a period anterior to the development of constitutional symptoms and of cerebral and mental derangement. If further proof were requisite, it is furnished by the peculiar and distinct violet colour of the blood-serum, together with the presence in it of a considerable quantity of carbonate of ammonia, a product of decomposed urea; these being the characters which, according to Frerichs, Litzman, Braun, Heller, Kletzinsky, Oppolzer, Gegenbauer, Lehmann, and others, are generally found in the blood-serum of puerperal females attacked with uræmic eclampsia."‡

But if the question arises, Why should uræmia in the puerperal female produce convulsions and coma in one instance, and mental

\* Quoted by Dr. Gooch.

† 'Diseases of Women,' 2nd ed., p. 116.

‡ See translation of Braun, on "Puerperal Uræmic Eclampsia," 'Edin. Med. Journ.,' vol, ii, p. 1029.

aberration with a rapid pulse in another? To such Dr. Donkin replies, that we cannot expect the poisons engendered in the blood by the retention of the renal secretion to be exempt from the well-ascertained principle of toxicology—that the action of almost every known poison is modified or entirely changed in character according to the dose, to idiosyncrasy, and the like influences. Besides, it is quite possible that in the one disorder a species of poison may be developed different from that which excites the other.

To the history of this case Dr. Donkin appends some able observations on its special pathological relations to the theory in question, and concludes his argument with the following remarks:—"If it should be objected that a single case is not sufficient evidence to establish the accuracy of my views, I must observe that the maxim which applies to investigations in natural history is equally applicable to those of pathology, namely, that although a single typical specimen may not be sufficient to establish a species, it is at least amply so to display its characters. But even should future investigation not corroborate the accuracy of my observations, yet I trust they will effect some good, at least, by directing others still more closely to the examination of one of the most important and, at the same time, neglected subjects of obstetric pathology. I say neglected, because I can only find recorded five cases of the acute dangerous variety of puerperal mania in which attention was directed to the condition of the urine. Four of these are the cases recorded by Professor Simpson.\* In all of the four, albuminuria existed at the outset of the mania. In one of them puerperal convulsions occurred before delivery, with very marked albuminuria; and after a very brief convalescence and absence of albumen, acute puerperal mania set in, and the urine was again found to be highly albuminous. In another case there were two sudden attacks of puerperal mania, with a week's interval between them, and at the commencement of each attack the urine was loaded with albumen, and free from it in the interval. In one of these cases the duration of the mania was two or three weeks, and the albuminuria observed at the outset of the disease had disappeared entirely before the restoration of the intellect.

The fifth case alluded to is recorded by the late Dr. Graves, in the last edition of his 'Clinical Lectures.'† This was the case of a young woman (æ. 21), apparently of sound constitution. On the sixth day after giving birth to a seven-months' child she became the subject of acute puerperal mania, accompanied with a very rapid

\* 'Edin. Med. Jour.,' vol. ii, 761. Dr. Simpson, more recently, states that he has repeatedly seen the same connection between puerperal mania and albuminuria as well as had other instances communicated to him. (Lec., 'Med. Times and Gaz.,' Nov. 10, 1860.)

† Vol. ii, p. 301.

pulse (125), when admitted into the hospital, on the second day of the disease; she had been twice bled previously. She died on the eighth day of the attack, and up to her death the pulse is recorded to have kept as high as 120. Her skin was moist and perspiring, but the lochia and milk were suppressed. There was great pervigilium, she having slept twice, and on one of these occasions, after taking, in frequent small doses, three grains of acetate of morphia, the mania closely resembled delirium tremens. Death took place by way of asthenia. An investigation of the body was made six hours after death, before decomposition could have altered the most delicate tissue. Attention was specially directed to the condition of the brain and uterus. "But," observes Dr. Graves, "the most careful examination could discover in the brain no phenomena in the remotest degree capable of explaining the occurrence of delirium or death." He further adds, that "the structure of the uterus was natural, and it exhibited nothing worthy of remark in its interior. The rest of the abdominal viscera were healthy." The kidneys are not separately mentioned by Dr. Graves, but he directs especial attention to a symptom which he considered to be of "very considerable importance;" and very justly so, for it was no other than a great "diminution of the urinary secretion." The patient is described as having once voided urine, and that once on the third or fourth day of the attack. Unfortunately, however, her urine was not examined, otherwise the pathology of the case might not have appeared a mystery.

*On the Influence of Sex in Hereditary Disease.* By W. SEDGWICK.

(*British and Foreign Medico-Chirurgical Review.*)

In an elaborate paper upon this subject in the last two numbers of the '*British and Foreign Review*' (April and July, 1863), Mr. Sedgwick has recorded numerous facts, which he has been at the pains to collect from various English and French sources; so numerous, indeed, are his observations, that his paper will supply a valuable storehouse of references to those who may wish specially to study the subject. The more general reader, overwhelmed by the multitude of unconnected details which seem to point to no conclusion, may, perhaps, find the ancient adage involuntarily rise to his lips—*Non numerandæ sed perpendendæ observationes*. It is an adage, however, which is more often the refuge of idleness unwilling to labour at the tedious collection of facts, than it is the legitimate expression of a just censure. On the influence of sex upon hereditary insanity Mr. Sedgwick makes the following observations:

"Among writers who have directed special attention to the heredi-

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