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NOTES AND ILLUSTRATIONS OF THE DIS- QUISITION ON PUERPERAL FEVER.

By EDWARD BLACKMORE, M.D.

(Continued from page 341.)

The relation of the living forms of the disease to the anatomical characters is an important topic of inquiry. The practical nature of a case does not appear to me to be so much founded on the inflammation being situated in any one organ or texture of the abdomen, as it has seemed to some writers. The more asthenic nervous putrid symptoms are often indeed connected with disease in the fibrous and mucous textures, and in the veins and absorbents of the uterus, and the more inflammatory symptoms with inflammation of the general peritonæum. This connection, however, is not constant, and the form of the case seems more closely related to the state of the disease than to its special seat. The elaborate anatomical statistics which have appeared, are grand monuments of the industry of those pathologists who have, at so much personal risk, acquired those materials; but the mere anatomy of the cases has not determined their pathology, nor in all cases has it explained their malignant aspect. The course of the disease is not very different, whether the inflammation be situated in the uterus or in the intestines; and in the mucous or in the serous coats of the uterus; and in its substance, or in the ovaries; and certainly its malignity is not referrible to its affecting chiefly the uterine veins. The phenomenon that seems not a little marvellous is, that the disease is equally fatal in the state of inflammation with effusion, and in that of suppuration and gangrene. Before effusion happens, the abdominal congestion must have been excessive; the circulation of the congested blood is slow; the red blood becomes black in the capillary arteries. I believe this is proved by physiologists to be the immediate consequence of a stagnation of blood in any texture. This venous blood seems to act as a sedative poison to the small vessels, and impairs their tonic powers, whence follows a profuse transudation of serum and coagulable lymph.

The effusion is quickly succeeded by a remarkable collapse of the vital powers, which may be partly owing to the mechanical impediment to respiration from the distention of the abdomen, (if indeed this distention be greater after, than shortly before the effusion,) but more I think to the brain thereby not having its due supply of blood, just as is seen in tapping in ascites. Dr. J. Hamilton thought the effused fluid was noxious, and that this quality occasioned

the rapid sinking of the vital powers. This is possible for I have known wounds received in the dissection of puerperal fever cases to be particularly injurious. The case, however, is not always fatal after effusion. Dr. Gooch gives an example of recovery after it.

Some cases very much resembling in their symptoms the typhoid variety of puerperal fever, have been noticed by Dr. J. Clarke, Dr. Hamilton, as already mentioned, and others, and attributed to the retention of relics of the placenta in a putrid state. A gangrenous state of the interior of the uterus, from *previous inflammation*, appears to have been sometimes mistaken for relics of a putrefied placenta; and this gangrenous inflammation seems to have occurred in some cases styled puerperal fever, from a peculiarity of the patient's constitution, and not from the specific poison of puerperal fever. I have seen the placenta much diseased where no symptoms of uterine disorder had existed. It is difficult to conceive that the placenta should putrefy in the uterus without co-existing disease of the mucous coat; and equally doubtful that mere putrescence of the placenta would so seriously affect the system as it is assumed to do. Is it proved that the absorbents will take up putrid matters formed in the body? In cases of cancerous ulceration of the stomach, I have not seen irritative fever. Pus is found in the absorbents, but it is not putrid; and it may also be formed within the veins from phlebitis. The affections of the system in the cases referred to, does resemble that from putrid matter injected into the veins, as seen in the experiments of Majendie; and it is like that also from inflammation of the veins in cachectic habits after venesection, as I have seen in patients bled in diabetes; but in the uterine cases referred to, this organ is probably in such a state of congestion as would prevent the absorption of any of its morbid contents. The unhealthy suppuration and gangrene seen in various organs, in the more malignant cases of puerperal fever, I should refer to co-existence of morbid action in the several parts, rather than to the absorption of morbid matter from one part and its deposition in another, as some anatomical pathologists have represented.

M. Dance has noticed this affection, (which I think may be a spurious variety of puerperal fever,) of which he appears to think uterine phlebitis the chief element, which is, however, generally complicated with inflammation of the mucous and fibrous textures of the organ. In the stage of simple local inflammation, he says, the symptoms may be obscure, fever slight, and no vomiting; generally a purulent fetid discharge from the vagina. In the next stage, when the disease

has extended itself to the ovarian or abdominal veins, and pus is absorbed or diffused in the blood-vessels, terrible symptoms ensue, rigors, delirium, abscesses in various parts. In all the cases the disease was fatal at the end of the third week. It seemed to be connected with the (violent?) separation of the placenta; the spermatic veins which supply the fundus of the uterus were generally affected; the morbid appearances very exactly like those in my ninth case, which I have separated from the fever cases. While, however, I believe that all cases of this description are not examples of puerperal fever, they do exhibit the strongest characteristics of its most malignant form, particularly as seen in hospitals; and as similar cases are seen interspersed among those of the synochal form in the same epidemic, over an extended district of a country, they conduce to determining the nature of the puerperal fever affection in general. The state of the mind, and of the nervous system, of the respiration and the pulse, the vomiting of vitiated fluids, the fetid lochia, when not suppressed, all betoken a specific fever, with a local disease of a corresponding character.

It has been said, I think incorrectly, that the peritonæum of the uterus invariably exhibits signs of recent inflammation, whenever the disease has severely affected the other abdominal viscera. The uterus is not always enlarged and painful, and in some cases it has shown no morbid appearance after death.

Suppuration has occurred on the folds of the peritonæum, betwixt the vagina and rectum, whence the matter has gravitated over the psoas muscle to the groin; but it is very rare, as indeed is suppuration in any part of the abdomen, in these puerperal fever cases.

The cases have been arranged by an eminent accoucheur, in four orders, according to the distinct affection of (a) the uterine peritonæum; (b) its appendages; (c) of the mucous and fibrous textures of the uterus, with softening; (d) of its veins and absorbents. This classification is probably too refined for pathological and practical objects. It is doubtful that (a) ever is found apart from (b). The constitutional affection in the last two classes is said to be similar, but different from that in the first two. The same sort of morbid action, however, does affect each of these textures, and both sets of lesions are found in some cases where the living forms of the disease are similar.

In considering the cases which exhibited two forms, the synochal and typhoid, to be alike instances of puerperal fever, I am, with deference, opposing the high authority of Dr. John Clarke. He recognized an inflammatory fever in child-bed, with an attendant abdominal inflammation, for which he bled, which he regarded as not contagious or epidemic, nor did he call it puerperal fever. He confined this term to a low fever, with abdominal inflammation, epidemic, and seen chiefly in hospitals. The question then arises, to which of these classes do the Plymouth cases belong? They were not examples of synocha, or what Dr. Fordyce calls "general inflammation," from cold, with an attendant local inflammation; they were epidemic, contagious, and asthenic; yet not exhibiting the typhoid aspect, or that described by Dr. J. Hamilton as the portrait of genuine puerperal fever. Some of them, I understood, exactly resembled Mr. Hey's cases:—The brain not affected in the beginning; the

tongue not that of typhus; the blood sily and firm; yet rapidly fatal. Large bleeding did not save them. Is it not obvious that asthenic cases of the fever do not always show the low typhoid form to which Dr. Clarke restricted the term? and which restriction was so unfortunate for Mr. Hey, who, as stated before, finding a febrile affection with abdominal inflammation prevailing epidemically, inferred that it was puerperal fever, and therefore to be treated as a disease absolutely low and putrid in its tendency, until invariable failure compelled him to adopt another practice.

The conclusion seems irresistible, that puerperal fever is a disease in all cases essentially the same, not always of a low typhoid aspect, modified in its form by circumstances of season and the physical condition of the patient.

Its leading characteristics are, its rapid progress, high irritability of the vascular and nervous systems, and a disposition in the blood to separate into its constituent parts. It is not always of a synochal form at its onset, which becomes putrid only from the neglect of the local inflammation, as Dr. Gordon supposed; there is no fixed proportion in the extent of the local inflammation and the typhoid character of the constitutional disorder; the putrid cases are *ab ovo* putrescent in their tendency.

In the putrid variety Dr. Walsh found the uterus sound; and it was inflamed in the more inflammatory variety. Dr. Leake observed little of delirium in child-bed fever, except when the uterus was inflamed, probably in its fibrous texture; in which case Dr. Lee also remarked much nervous disorder. He also observed, that when the peritonæum of the uterus was inflamed, the uterine appendages were so also. From Mr. Hey's cases it appears that the more inflammatory form was connected with peritonæal inflammation, and generally also with that of the uterus; but Mr. Hey rightly concluded that the character of the disease is not essentially affected by the inflammation being seated in any particular texture.*

The soundest judgement of the pathology of the disease appears to me to be—first, that there is a primary constitutional disorder. The direct evidence indeed, is not so strong as in other essential fevers, the pure and the exanthematous; the sequence of the symptoms, as generally reported, does not prove it; the early rigor is not a proof, for pure local inflammation, from ordinary causes, as cold and wet, begin so; that the pulse is quickened and the breathing disturbed, before any complaint of any local suffering is made, is no proof:—some local irritation, adequate to quicken the pulse, but not equal to occasion pains, may be subsisting. There is a want of evidence, as already said, on the state of the patient in the interval of the delivery and of the first complaint, which it is desirable to supply. In many cases no morbid predisposition is manifest.

The evidence, therefore, on this point in the pathology, is chiefly *analogical*, and derived from the resemblance of the disease to other diseases

* Since the present disquisition was concluded, I have met with an admirable paper on puerperal diseases, by Dr. Helm, of Vienna, translated by Dr. Scott Thompson, in the "London Medical Gazette" for April and May, 1838, to which I would call the attention of my readers. Professor Ferguson's invaluable Treatise also, and Mr. Moore's, it is my misfortune to have seen only lately.

known to be primary fevers, *e. g.*, petechial—typhus, and the exanthemata, and from the probable fact of its originating from a contagion, by which, as in the case of the plague, and of erysipelas, in some cases at least, the whole system, the blood particularly, is infected, before a local disease is developed; and the extreme diffusion of disease in the course of the puerperal fever, proves that it is more than a malady purely local in its embryo state.

Dr. Osborne, with whom the name seems to have originated, does not distinctly speak of it as a primary fever, yet he seems to have thought it such, as he says its character is modified according to that of the prevailing inflammatory, nervous, or putrid fevers.

Dr. Fordyce seems to have regarded it as a peculiar local inflammation.

Dr. J. Clarke regarded it as a primary fever, but confines the name to the low putrid form, while he recognizes, also, an inflammatory fever in childbed, on which peritonæal inflammation is attendant.

Dr. J. Hamilton says, "Three proximate causes have been assigned: (*a*) translation of the milk; (*b*) typhus modified by the peculiarities of the puerperal state; (*c*) inflammation of the peritonæal coat. (*a*) In the commencement the mamma is flaccid, the milk ceases to be secreted; if the case is fatal, milk is found in the abdomen; if favourable, the first good symptom is a return of milk; therefore, the disease is from milk in the abdomen! This is the opinion over the continent." (Dr. Hamilton must here refer to the pathology of the last century.)

"In every acute disease all healthy function ceases; the secretion of milk must be stopped. But Dubois says, 'look at the effused fluid in the abdomen; is it not like milk?' So Morgagni: 'There is no such effusion in common inflammation; therefore it is from the milk.' But effusion takes place from different serous membranes, where milk is not concerned. See Morgagni, for instance, in the fatal termination of pneumonia in the male sex. In puerperal fever, the effused fluid has no oil or saccharine matter, which milk always contains." (This old continental doctrine may be interesting as a pathological curiosity; the pains of refuting it were superfluous.)

(*b*) "The primary symptoms are the same with typhus, and the diseases have occurred in the same place and time as epidemics; the exciting causes are the same, and the maladies are convertible; one exposed to the infection of puerperal fever has typhus, and conversely.—There is, in both diseases, impaired energy of the nervous system, and irregular action of the vascular system; but the primary symptoms of these diseases are not the same. In puerperal fever, pain in the abdomen is a primary symptom; and diseases of different species, as whooping cough, catarrhal fever, and measles, prevail together; the exciting causes are not the same, *e. g.*, the disease prevailed in the Parisian hospital when erysipelas was prevailing in the surgical wards. The latter disease would follow on a trifling wound; *e. g.*, I saw cases of the palliative cure of hydrocele fatal from the erysipelas consequent. Want of ventilation produces the disposition to erysipelas, in such cases. The puerperal disease and typhus are not convertible. Dr. Walsh said that when the former was in the Infirmary the nurses were seized with typhus. This Dr. Young denies: 'The case was a

catarrhal affection from fatigue of body and mind.' Typhus is found in lying-in-patients, unaccompanied with the symptoms of puerperal fever. I saw a case of fatal typhus in childbed, from lying in an infected bed; no pain or purging."

(*c*) "Inflammation of the peritonæum: a plausible theory, but doubtful. The pulse is sometimes hard and quick in puerperal fever, but never so in hospitals; the symptoms do not indicate an inflammatory affection, except under peculiar circumstances. In a case of enteritis supervening in a state of debility, (in child-bed,) the countenance indicates patience; in puerperal fever, you see despondency in the countenance, flushing of the face, and dull eyes; pain is scarcely complained of, until the abdomen is pressed; and bleeding hastens death; and remedies that check the progress of inflammation have no power in puerperal fever. The pain is relieved on effusion taking place, but the breathing is more laborious, the pulse more frequent, the strength sinks. There is something noxious in the effused fluid, for there is not that sinking in effusion in pleurisy; the effusion is disproportionate to the extent of the peritonæum apparently inflamed; the inflammation does not penetrate the substance of the uterus, nor in general extend to its peritonæal covering. There is, however, a specific inflammation of the peritonæum in puerperal fever. This is the impediment to curing the disease. Each specific inflammation has its proper series of phenomena. The proximate cause of puerperal fever is as obscure as that of scarlatina and variola."

Such are the opinions of the late illustrious Edinburgh Professor, which I think must be interesting to all practitioners.

(To be continued.)

CASES WITH OBSERVATIONS.

By GEORGE FIFE, M.D.,

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TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR, *

The following cases I send to you for insertion in the Journal, in consequence of each of them being characterised by some features of practical interest, if not importance. :—

CASE I.—FUNGOID TUMOUR OF THE TEMPORAL BONE INVOLVING THE INTERNAL EAR: MENINGITIS.

The first is that of a young man who died from disease of the brain, and who came under my care as a Dispensary patient.

George Barker, aged 25, a sailor, had generally enjoyed good health previous to shipwreck, which he suffered some months before I was requested to see him. He had, however, been subject to occasional attacks of earache from boyhood, at which period he had scarlet fever. The ear occasionally discharged. When I visited him he laboured under partial paralysis of both sides of the body, but not amounting to complete hemiplegia on either; complained of most excruciating pain of head, extending principally from above the right ear up to the coronal region. This pain was frequently so intense as to give rise to acute maniacal