it; and I do not think that the non-parturient womb is very susceptible of its stimulus. Nor can I say that I have found the ergot very effective, when given after delivery, in atonic hæmorrhage; although I willingly defer to the contrary opinion held by many distinguished accoucheurs.

Rochester, February 1851.

ON THE RELATIONS OF UTERINE TO CONSTITUTIONAL DISORDER.

By F. W. MACKENZIE., M.D., Physician to the Paddington Free Dispensary for the Diseases of Women and Children, Fellow of University College, etc.

Of those who have devoted themselves to the study and investigation of morbid phenomena, we may recognize two principal classes. The one, looking more especially to the alterations of structure which are occasioned by disease, endeavour to deduce from them and the study of their specific characters, anatomical, chemical, and physical, the laws which regulate their development, and the principles which should guide us in their prevention and cure. The other, looking beyond the mere structural changes themselves, seek to determine their mode of origin and formation by an examination of their causes, the circumstances by which they have been preceded, and the order and sequence of morbid actions. Each of these methods of inquiry has its advantages, whilst both are conducive to the extension of medical science; and while it would be invidious to draw any parallel between their respective merits, we may at least admit the importance of that which, by teaching us the incipient phenomena of disease, enables us to anticipate and avert those ulterior changes of structure which, when met with, are but little amenable to the resources of our art.

But in such investigations, it is necessary to carry our inquiries beyond those limits which custom or system has arbitrarily assigned to particular diseases. It is necessary to study closely the first deviations from health; to trace morbid actions from their more determinate to their more primitive conditions; and to note the order and succession of changes by which constitutional disorder becomes localised, and local disorder passes into organic disease. For it is too evident, that morbid action may have commenced before sensibility warns us of its existence, and that the mere perception of pain or uneasiness, or, indeed, of any sensible deviation from what is normal in a part, cannot be regarded as the commencement of disease. This may have begun long antecedently; and inquiry in such cases will often show that it had been attended by appropriate symptoms, which, if carefully sought

for and recognised in other instances, would enable us to avert those consequences which would otherwise ensue.

In the prosecution of this subject, much may be gained from physiology, for it is to the point at which physiological actions become pathological, that our inquiries should be mainly directed. Much, again, is to be learnt by collecting the histories of individual cases; and this should comprehend, not only their immediate symptoms and causes, but their remote antecedents also. By studying the particular circumstances or combination of events, which may have preceded or given rise to any particular lesion, we are enabled to anticipate its occurrence whenever similar circumstances cooperate; and this knowledge is eminently equivalent to power; with such power, medicine may claim to rank foremost among those sciences which have contributed most largely to the happiness and welfare of mankind. The knowledge of the past becomes our guide and security for the future; and in proportion as we have diligently watched and followed and correctly interpreted the workings of nature, are we enabled to direct, to modify, or control them, and thus to minister most successfully to the wants and necessities of our fellow creatures.

The relations which subsist between uterine and constitutional disorder have not, as it appears to me, been satisfactorily determined, nor have they received, perhaps, that degree of attention which the importance of the subject merits. According to the most recent doctrines which have been put forward, uterine disorder is sufficient to take the initiative in all those morbid conditions, constitutional as well as local, which are met with in the progress of uterine disease; and consistently with this view, the rule of practice has been to direct measures primarily and specifically to the uterine organs. The precise nature of the uterine malady has not, indeed, been clearly settled;—by one it is considered as congestive, by another as inflammatory and ulcerative, by a third as neuralgic, and by a fourth as a kind of mechanical displacement; but all agree in regarding it as of primary importance, and as the *fons et origo* of any coexisting disorders. Whether, however, such views are correct, or, at all events to the extent which has been contended for by some, may, I think, admit of reasonable doubt. I do not deny that uterine disease, when fully established, may react injuriously upon the constitution, or that some organs may suffer in the general reaction more than others; but if our inquiries are directed to the early history and mode of origin of such diseases, we shall find, I think, many reasons for believing that this is constitutional rather than local; that, whilst irritative disorder has preceded vascular disease, that this has mainly resulted from constitutional causes, and that it is less the reaction of the uterine malady upon a healthy than upon a disordered constitution, which gives rise to those complex and often intractable maladies which are sometimes met with in connexion with uterine diseases. The question involved in this inquiry is one of considerable practical importance; for if, on the one hand, it should appear that uterine disorders are for the most part local and isolated affections, and arise irrespective of general causes, it must follow that treatment of a local character, if not exclusively, must be chiefly required, and that the constitutional disorder will cease with

the uterine. If, on the other hand, it is true that uterine is generally preceded by constitutional derangement, and is mainly dependent upon it; then it must equally follow, that treatment, to be successful, must be addressed principally to the latter, and more subordinately to the former.

Those who have adopted the first of these views, and who look to uterine derangement as being for the most part idiopathic, and as initiating other disorders, and who regard the cervix uteri as the chief seat of the majority of uterine diseases, would seem to attach primary importance to the physical appearances which it presents under difficult circumstances, and have associated with many of them the presence of inflammation. In some instances however, it is possible that they may have interpreted these according to preconceived views of their nature. I say this, because the significance of certain appearances presented by the cervix in different cases has not as yet been clearly determined. In regard to the diagnostic characters of inflammation, there is confessedly much difference of opinion, and there is still more as to those of ulceration. But in determining the nature of any physical changes which may be met with in an organ, it is necessary to take into consideration the general and local symptoms with which they are attended, in order to arrive at correct conclusions, for the mere anatomical characters of inflammation may be present without inflammation actually existing. Now, on this point, the cases under consideration possess no kind of uniformity. I have met with some in which inflammation and ulceration had been diagnosed after ocular examination, in which there was neither local pain, uneasiness, or functional disorder, or any febrile or constitutional derangement. In some instances, it is admitted that the general health has been perfectly good, where the cervix has presented the so-called appearances of inflammation; and they have been met with after death in persons who had died of other diseases, and who had never experienced any uterine pain, derangement, or uneasiness. Now such facts are calculated to shake our confidence in the inflammatory nature of *some* of these appearances of the cervix. I do not doubt the necessity or the importance of making an ocular examination of the uterine organs in cases of doubtful disease; but in estimating the character of the appearances which are observed, we should proceed with much caution, and with a due attention to the general and local symptoms which are met with in each case. In this country the subject of the physical characters of inflammation has been very carefully investigated by Dr. Yellowley, in an essay on the vascular appearances of the stomach, published in the *Medico-Chirurgical Transactions*, and he has shown that all the characters of true inflammation may be met with when no such disease could have existed. They were found in an intense degree in the mucous membrane of the stomach in healthy criminals who were executed in the prime of life, and in patients who had died of other diseases, quite unconnected with any affection of the stomach. He observes also very truly, "that in judging of the existence of external inflammation in the living body, it is not by mere redness or turgescence of vessels that the opinion is guided, but by those circumstances in conjunction principally with pain, heat, and

swelling. It does not therefore appear to be less necessary, he observes, for the purpose of enabling us to judge of the existence of internal inflammation, that *something unequivocal in the symptoms* should be superadded to the *appearances* submitted to our consideration, than that there should be assistance required in judging of external affections in addition to mere colour or vascularity." The conclusions which Dr. Yellowley has arrived at on this subject have generally been assented to by the pathologists of this country, who avail themselves of his investigations in deciding upon the inflammatory nature of the physical appearances which are met with in different organs. The uterus can be no exception to their truth; and bearing them in mind, we may venture to doubt whether the appearances which have been attributed to inflammation of the cervix may not in some cases have another origin, and be indicative of other pathological conditions.

Again, in accounting for the origin, and the supposed frequency of these inflammatory lesions, we are referred by some writers to the anatomical and physiological characters of the uterine organs, to the vascularity of the cervix, the presence of cellular tissue in it, and the peculiar functions which these organs are destined to fulfil. But surely in such views there must be some fallacy. It is scarcely consistent with the usual providence of nature, to suppose that such susceptibility to disease should be the necessary consequence of the due performance of the ordinary functions of an organ; and when a writer gravely tells us that the function of parturition cannot take place without inevitably, in many, if not in all cases, being accompanied by erosion, laceration, and contusion of the lining membrane of the cervix, we are tempted to inquire if this can really be so; and whether this can truly be said of the organ—the contemplation of which of old inspired Galen with such wonder and admiration, and which Swammerdam, many centuries afterwards, described as the *miraculum naturæ*. I do not think that all can participate in such views; there must be many who believe that the uterine organs have been constructed so as to be adequate to the proper performance of their allotted functions, and who are disposed to look elsewhere, than to their anatomical and physiological characters, for an explanation of the source of their morbid actions.

But, on the other hand, it is a well-established fact, that local diseases may arise exclusively from derangement of the general health—from morbid conditions of the blood—irritative disorder of organs which have extensive sympathies and abnormal states of the nervous and ganglionic centres. This principle was strongly inculcated by Abernethy, is in harmony with the doctrines of Hunter, and has been practically recognized by a host of English practitioners. A due appreciation of it has, moreover, led to very valuable results in practice. It has taught us to look beyond the mere appearance of things; to trace morbid actions up to their remote origin or source; and thus to arrive at more rational and successful modes of treatment. Upon this principle, we are often able to connect local diseases with causes with which at first they would appear to have but little connexion, and the application of this doctrine is daily becoming more extended, as our knowledge of the nervous system and of physiology generally is ad-

vanced. "I must confess," says Sir Benjamin Brodie, "that, in proportion as I have acquired a more extended experience in my profession, I have found more and more reason to believe that local diseases, in the strict sense of the term, are comparatively rare. Local causes may operate so as to render one organ more liable to disease than another; but everything tends to prove, that in the great majority of cases there is a morbid condition, either of the circulating fluid or of the nervous system, antecedent to the manifestation of disease in any particular structure. Moreover, even in those cases in which a disease may be distinctly traced to some kind of mechanical injury, the character which it assumes depends as much on the state of the general health as on the injury itself."¹ By substituting for the general terms here employed, those which are significant of the particular diseases under consideration, we have in this passage those opinions clearly expressed, which it is the principal object of this paper to elucidate.

In considering how far this purpose could be best attained, and the relations of uterine to constitutional disorder most correctly determined, it has occurred to me to take a given number of uterine cases, to tabulate their principal antecedents and concomitants, and to observe their order, connection, and sequence. The subjoined table has been framed upon this plan; but I am aware that in constructing it I have not attained that degree of accuracy in its details which could be wished, and which is so necessary in inquiries of this kind. In questioning patients as to their state of health antecedently to any particular malady, it is extremely difficult to obtain from them satisfactory information. On casual inquiry, they will often say that they had been perfectly well, when, on further questioning, they will admit that they had been far otherwise. In soliciting information from patients respecting their maladies, I am also aware that the inquirer is apt to put questions which are calculated to elicit partial information, and such as may be favourable to certain preconceived views. This error I have also endeavoured to guard against in taking the histories of the cases from which this table is constructed, and I have sought to obtain the real facts connected with them, without being influenced by any particular bias. Indeed, when I commenced these inquiries, I had none whatever; and any opinions I may now entertain on the subject of uterine diseases, have entirely resulted from a consideration of facts which have come under my observation. Some of these I have endeavoured to analyse and embody in the subjoined table, in the hope that they may serve to throw some additional light upon the pathology and early history of uterine disorders. I have selected a hundred cases, because that number appeared to me to be sufficient to form a basis for comparison. I could have extended the number, but it did not appear to me that my object would have been materially advanced by doing so.

¹ BRODIE, Sir B., *Diseases of the Joints*, p. 25. *Fifth Edition*.

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
1	E. S.	69	Carcinoma, metrorrhagia	Long continued mental anxiety, dyspeptic symptoms, nervous derangement.	Gastro-hepatic and intestinal disorder, asthenia
2	I. O.	21	Dysmenorrhœa, leucorrhœa	General ill health, nervous depression & weakness, dyspeptic symptoms	Dyspepsia, with marked hepatic and intestinal derangement
3	C. G.	40	Carcinoma, metrorrhagia	Severe trouble, mental uneasiness, marked dyspepsia, nervous prostration.	Anæmia in a marked form, with gastro-intestinal disorder
4	H. P.	45	Hysteralgia	Mental anxiety and trouble, dyspepsia, and gastrodynia	Well-marked dyspeptic symptoms, and spinal irritation
5	S. S.	39	Metrorrhagia abortus	Great ment. uneasiness, agitation, dyspeptic symp.	Anæmia and derangement of digestive organs
6	S. C.	25	Leucorrhœa, dysmenorrhœa	Over fatigue, disturbed sleep, nervous prostration, dyspepsia	Anæmia, spinal irritation, hysteria, dyspeptic symptoms
7	M. L.	17	Leucorrhœa	Weakness, nerv. prost., and dyspeptic symptoms	Anæmia, gastro-hepatic derangement
8	E. S.	25	Profuse leucorrhœa, dysmenorrhœa	Much mental uneasiness, languor, and general weakness, dyspeptic sympt.	Anæmia and general derangement of the digestive system
9	S. G.	38	Hysteralgia, leucorrhœa, dysmenorrhœa	Mental uneasiness, dyspeptic sympts., gen. weakness, ill health, rheumat.	Anæmia, gastro-intestinal derangement, nervous headaches
10	A. W.	34	Leucorrhœa	Bad health generally, dyspepsia	Nervous debility and dyspepsia
11	M. S.	49	Metrorrhagia, carcinoma	Severe & long continued mental anxiety, dyspepsia	Anæmia, severe dyspepsia, spinal irritation
12	M. M.	36	Leucorrhœa	General weakness and ill health, dyspepsia	Anæmia, dyspeptic symptoms, severe gastrodynia
13	M. C.	26	Leucorrhœa, menorrhagia	Derangement of the digestive organs.	Derangement of the digestive organs
14	J. W.	21	Leucorrhœa	Hæmorrhage post part., gastro-intestinal disorder	Anæmia, asthenia, gastro-intestinal disorder
15	C. W.	36	Leucorrhœa, menorrhagia	Long-continued dyspepsia.	General derangement of the digestive organs
16	E. S.	22	Hysteralgia, leucorrhœa	Dyspepsia, much intestinal derangement	Anæmia, spinal irritation, gastro-intestinal disorder
17	S. K.	25	Hysteralgia, irreg. menstruation, leucorrhœa	Weakness, nervous depression, and dyspepsia	Anæmia, disorder of the stomach and digestive organs
18	E. C.	23	Leucorrhœa, amenorrhœa	Over fatigue, physical exhaust., dyspeptic symp.	Anæmia, gen. debility, gastro-intestinal disorder
19	C. B.	33	Leucorrhœa, hysteralgia	Protracted suckling in the case of two children, dyspep. symps., weakness	Anæmia and severe dyspepsia
20	M.A.H	31	Leucorrhœa	Bleeding and salivation for pleurisy, hæmorrhage post partum, dyspepsia	Well-marked anæmia, gastro-intestinal disorder
21	M.A.P.	24	Leucorrhœa	Anxiety, trouble, dyspep.	Anæmia, dyspepsia
22	R. L.	22	Amenorrhœa	Residence in a damp and unhealthy situation, gen. debility and dyspepsia	Anæmia, feverishness, dyspeptic derangement, bronchocele
23	E. E.	21	Metrorrhagia hysteralgia	Labour two months ago, the digestive organs subsequently disordered	Anæmia, marked disorder of the stomach and digestive organs
24	M. W.	36	Irritable uterus	Difficult labour, attended and followed for some time by hæmorrhage, extreme weakness, dyspeps.	Anæmia in a severe form, great derangement of the stomach and digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
25	M.A.H	31	Leucorrhœa	General ill health and weakness, dyspepsia	Anæmia, disorder of the stomach & digestive orgs.
26	M.A.B.	15	Amenorrhœa	General weakness and nervous prostration	Well-marked anæmia, disord. stom. & digest. org.
27	E. M.	30	Leucorrhœa, hysteralgia	Several labours attended with much loss of blood, gen. weakness, prostration	Anæmia, dyspepsia, piles, and hæmatemesis
28	M.A.M	23	Leucorrhœa	Weakness, nervous symptoms, dyspepsia	Anæmia, considerable disorder of the stomach, and digestive organs
29	C. P.	30	Uterine hæmorrhage at the 7th month of preg.	Anxiety and uneasiness of mind, dyspeptic symptoms	Sickness and great disorder of the stomach and digestive organs
30	M. R.	17	Amenorrhœa	Weakness and dyspepsia, much disorder of the stomach and bowels	Anæmia, great disorder of the stomach and digestive organs generally
31	A. S.	40	Irregular menstruation and leucorrhœa	General ill health, prostration, disordered stomach and bowels	Anæmia, diarrhœa, much chylopoietic derangement
32	E. J.	44	Hysteralgia, leucorrhœa	A very severe illness, weakness, nervous symptoms, dyspepsia	Anæmia, asthenia, and dyspepsia
33	E. J.	51	Leucorrhœa	Much trouble & anxiety, bad living, tongue long disordered	Weakness, dyspepsia, nervousness
34	E. K.	44	Metrorrhagia	Severe attack of cholera, subsequently pregnancy, attended with much weakness and gastro-intestinal disorder	Extreme anæmia, marked disorder of the stomach and digestive organs, nervous symptoms
35	S. Y.	50	Leucorrhœa	Much anxiety of mind, dyspepsia	Bad gen. health, disordered stomach, nervous symptoms, rheumatism
36	E. W.	25	Hysteralgia, leucorrhœa	Weakness, languor and nervousness, bad health, much disorder of stomach and bowels	Anæmia, great disorder of the stomach and digestive organs
37	S. M.	30	Hysteralgia, leucorrhœa	Mental anxiety, over fatigue, languor, weakness, and depression	Anæmia, disorder of stomach and digestive organs, spinal irritation
38	M. M.	21	Scanty menstruation, leucorrhœa	Bad general health, nervous symptoms, weakness, bad morning tongue	Anæmia, disorder of stomach and digestive organs
39	S. S.	20	Leucorrhœa	Weakness, nervous symptoms, dyspepsia	Anæmia, disord. stom., and digestive organs
40	E. M.	27	Hysteralgia, leucorrhœa	Dyspepsia	Anæmia, disord. stom., and digestive organs
41	M. T.	25	Leucorrhœa	Rheumatic complaints	Anæmia, rheumatism
42	J. S.	35	Hæmorrhage post partum	Mental excitement, rheumatism	Anæmia, and rheumatism
43	A. D.	40	Suppres. mens., hysteralgia, leucorrhœa	Acute disorder of stomach and digestive organs prior to menstruation	Great derangement of the stomach and digestive organs
44	M. S.	37	Hysteralgia, leucorrhœa	Weakness, nervous symptoms, and dyspepsia	Anæmia, disorder of stomach & digest. organs
45	J. J.	38	Suppres. menses	Irregular menstruation, four very difficult labours, each attended with considerable flooding, mental anxiety, and indigestion	Anæmia, much disorder of the stomach and digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
46	A. B.	18	Suppressio mensium	Irregular menstruation, general weakness and prostration, dyspepsia	Anæmia, much disorder of the stomach and digestive organs
47	M. A. N.	18	Amenorrhœa, leucorrhœa, hysteralgia	Always had indifferent health, had small-pox at 12, has never been well since; weakness, and a bad tongue on awaking	Anæmia, great disorder of the stomach and digestive organs
48	M. C.	53	Leucorrhœa	Dyspeptic symptoms, rheumatic attacks, weakness, and gen. ill health	Anæmia, disorder of digestive organs, rheumatism
49	M. B.	21	Menorrhagia	Disorder of the stomach & digest. organs brought on by sea-sickness	Very great disorder of the stomach and digestive organs generally
50	J. V.	38	Metrorrhagia, fibrous enlarge. of uterus reaching to umbilicus	Considerable mental anxiety, constitutional weakness, occasioned by cholera, dyspeptic symps.	Marked anæmia, disorder of stomach and digestive organs
51	S. W.	34	Hysteralgia, dysmenorrhœa, leucorrhœa	Protracted suckling, weakness, dyspepsia	Anæmia, disorder of stomach and digestive organs
52	M. A.	32	Hysteralgia, menorrhagia, leucorrhœa	Bad general health, weakness, dyspepsia	Anæmia, disorder of the digestive organs generally, spinal irritation
53	M. A. W.	23	Hysteralgia, suppress. mens., leucorrhœa	Protracted suckling, general weakness and prostration, dyspeptic symptoms	Anæmia, much disorder of the digestive organs generally
54	E. L.	25	Hysteralgia, dysmenorrhœa, leucorrhœa	Much mental anxiety, bad general health, weakness, and dyspepsia	Anæmia, disordered stomach and digestive organs, spinal irritation
55	A. H.	38	Irreg. menstruation, profuse leucorrhœa	Anxiety and trouble	Anæmia, general weakness and prostration, disorder of digestive organs
56	J. T.	38	Irregular menstruation, profuse leucorrhœa	Mental uneasiness, long residence in a tropical climate, general prostration, and dyspepsia	Marked anæmia, and great disorder of the digestive organs
57	P. W.	35	Hysteralgia	Mental uneasiness, much disorder of the stomach and bowels	Asthénia, depression, great disord. of stomach & digest. organs., spinal irrit.
58	C. W.	31	Hysteralgia, dysmenorrhœa, leucorrhœa	Mental anxiety and trouble, five very difficult labours, preceded by much disorder of digest. organs	Anæmia, spinal irritation, great disorder of the digestive organs
59	E. S.	23	Irregular menstruation, leucorrhœa	Never had good health, menstruated at 18, previously to which, and subsequently, the digestive organs have been disordered; 16 months ago was much frightened, uterine ailments have been much aggravated since	Anæmia, dyspeptic symptoms, intestinal disorder, spinal irritation
60	S. M.	20	Hysteralgia, irreg. menstru., leucorrhœa	Anxiety and mental excitement, dyspeptic symptoms	Anæmia, disordered stomach and digestive organs, spinal irritation
61	S. H.	32	Metrorrhagia, miscarriage	Anxiety, dyspeptic symptoms, weakness, and nervous depression	Anæmia, disorder of the digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
62	M.A.H	30	Dysmenorrhœa, leucorrhœa	Bad general health, depression, dyspepsia	Anæmia, disor. of digest. orgs., gen. weakness and depress., spinal irritation
63	R. G.	24	Metrorrhagia	Two months after labour, attended and preceded by much mental anxiety, dyspepsia	Anæmia, disorder of the digestive organs
64	L. F.	36	Hysteralgia, dysmenorrhœa, leucorrhœa	General health very bad, anxiety & trouble, dyspepsia, weakness, depression	Anæmia, disorder of digestive organs, spinal irritation
65	M.A.B.	17	Amenorrhœa	Bad health, anxiety, great fatigue, dyspepsia, weakness, and depression	Great disorder of digestive system, intense anæmia, nervous symptoms, and spinal irritation
66	E. M.	21	Hysteralgia, leucorrhœa	Weak, low, and generally out of health	Anæmia, disorder of digest. organs, & spinal irrit.
67	A. B.	36	Irregular and painful menstruation	Bad general health, anxiety & trouble, weakness and depression	Anæmia, great derangement of the digestive organs, and prostration
68	S. W.	27	Profuse leucorrhœa and dysmenorrhœa	Very bad health, dyspepsia	Anæmia, dyspepsia, dysuria
69	E. P.	28	Menorrhagia, leucorrhœa	Great weakness & very bad health, anxiety of mind and dyspepsia	Anæmiated, disorder of digestive organs, spinal irritation
70	M. N.	43	Hysteralgia, dysmenorrhœa	Very bad health, much ment. anxiety, dyspepsia, very difficult labour	Anæmia, disorder of digestive organs, spinal irritation
71	E. E.	27	Hysteralgia, irreg. menstrua., leucorrhœa	Weakness and depression	Anæmia, disorder of digestive organs
72	S. W.	45	Hysteralgia, leucorrhœa	Great anxiety, very bad health, and severe labour	Anæmia, disorder of digest. organs, spinal irrit.
73	S. N.	26	Hysteralgia, irreg. menstrua., dysmenorrhœa	Bad health, dyspepsia	Anæmia and disorder of the digestive organs
74	S. W.	33	Hysteralgia, profuse leucorrhœa, dysmenorrhœa	Great mental anxiety, hæmorrhages after labours, general prostration	Anæmia, disorder of digestive organs, spinal irritation, hysteria
75	E. N.	28	Hysteralgia, dysmenorrhœa	Much anxiety, bad health, dyspepsia	Anæmia, disorder of digest. organs, spinal irritat.
76	A. A.	23	Amenorrhœa	Weakness, gen. deprsn. disorder of digest. organs	Anæmia, marked disorder of digestive organs
77	J. C.	29	Profuse leucorrhœa, dysmenor.	Excessive fatigue, depression, and dyspepsia	Anæmia, disorder of digestive organs
78	E. H.	26	Hysteralgia, irreg. menstrua., profuse leucor.	Bad general health	Anæmia, asthenia, disorder of digestive organs
79	M.A.H	37	Hysteralgia, fibrous enlargement of cervix	Mental anxiety, weakness, and depression	Anæmia, dyspepsia, spinal irritation
80	C. G.	27	Irreg. & painful menstruation, leucorrhœa	Very bad health, weakness, and gastric disorder	Anæmia, derangement of digestive organs very marked
81	S. H.		Scanty & painful menstrua., profuse leucorrhœa	Scrofulous disease, general prostration	Anæmia, gastrodynia, and dyspepsia
82	E. H.	17	Amenorrhœa	Weak, nervous, and generally out of health	Anæmia, disorder of digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
83	E. A.	31	Irregular menstruation, hysteralgia, leucorrhœa	Over fatigue, mental agitation, dyspepsia	Derangement of the digestive organs
84	L. C.	43	Hysteralgia, dysmenorrhœa	Mental anxiety, hysteria, dyspepsia, weakness	Anæmia, hysteria, dyspepsia, spinal irritation
85	S. D.	27	Leucorrhœa	Bad health, weakness, and dyspepsia	Anæmia, disorder of the digestive organs
86	M.A.H.	26	Scanty & painful menstruation	Bad health	Anæmia, marked dyspepsia
87	S. S.	35	Irreg. & painful menstruation, leucorrhœa	Bad health, weakness, and nervous symptoms	Anæmia, disorder of digestive organs, nervous symptoms
88	M. G.	37	Hysteralgia, dysmenorrhœa, leucorrhœa	Weakness, depression, and gastric disorder	Anæmia, and derangement of digestive organs
89	M.A. B.	34	Hysteralgia, leucorrhœa	Severe labour, preceded by bad health and gastric disorder	Asthénia, general disorder of digestive organs
90	M.A. B.	34	Profuse and persistent menorrhagia, recurring frequently for years, fibrous enlargement of the neck and body of the uterus	Long continued derangement of the stomach and digestive organs; severe flooding after labour	Anæmia, considerable disorder of the stomach and digestive organs, nervous symptoms
91	J. K.	18	Irregular, scanty, and painful menstruation	Bad health, and derangement of digestive organs	Anæmia, nervous symptoms, and great disorder of digestive organs.
92	E. W.	25	Dysmenorrhœa, profuse leucorrhœa	Bad health, depression, dyspepsia	Anæmia, nervous symptoms, and disorder of digestive organs
93	A. E.	23	Dysmenorrhœa,	Bad health, dyspepsia	Anæmia, dyspept. symptoms, spinal irritation
94	M.S.R.	40	Metrorrhagia, fibrous enlargm. of neck and body of the uterus	Mental anxiety, weakness and depression, long continued disorder of digestive organs	Anæmia, great derangement of the stomach and digestive organs
95	E. J.	30	Irregular and often excessive menstruation, leucorrhœa	Much mental uneasiness, impaired general health, dyspeptic symptoms	Anæmia, depression, disorder of digestive organs
96	J. J.	24	Dysmenorrhœa, leucorrhœa	Weakness and bad health, dyspepsia	Anæmia, dyspepsia
97	J. I.	26	Hysteralgia, dysmenorrhœa, leucorrhœa	Bad health and debility, depression, dyspepsia, & nervous symptoms	Anæmia, dyspepsia, and nervous symptoms
98	M. O.	26	Irregular and very scanty menstruation	Mental uneasiness, occasioned by leaving home, weakness and nervous symptoms, dyspepsia	Intense anæmia, marked disorder of the stomach and digestive organs
99	M.F.S.	19	Metrorrhagia, leucorrhœa	Weakness, nervous symptoms, dyspepsia	Anæmia, very marked derangemt. of digest. org.
100	M.E.B.	27	Menorrhagia and severe leucorrhœa	Previous miscarriage, long continued derangement of digestive organs	Anæmia, and very severe derangement of digestive organs

On analysing this table, it will be found to comprehend thirty-seven cases in which the uterus was morbidly irritable; fifty-two cases of disordered menstruation; sixty-five of leucorrhœa; and seven of organic disease. These affections were variously blended in different cases; and, upon the whole, it may be said to be rare for any uterine disorder to be met with in a perfectly isolated form. Irritable affections, for instance, are generally associated with either menstrual or leucorrhœal disorders. Menstrual disorders seldom occur without leucorrhœal discharges, or some other kind of uterine derangement; whilst leucorrhœa is so frequent a concomitant of all morbid conditions of the uterine organs, whether functional or organic, that it can scarcely be regarded in the light of an idiopathic disease. With regard again to antecedents, the table points to the fact, that in nearly all the cases some derangement of the general health preceded the uterine disorder. The occurrence of languor, weakness, and depression, would show that there had been antecedent disturbance of the nervous system. The digestive organs must have been disordered in the majority of these cases, whilst the symptoms referable to the nervous and muscular systems would tend to show that there was probably some abnormal condition of the circulating fluid. In looking to the concomitant affections, again we observe that a disordered condition of the chylopoietic organs is very frequently, if not invariably, met with; that anæmia presents itself concurrently with uterine derangement in a large proportion of such cases, amounting to nine-tenths of those which are contained in the table. Spinal irritation was met with in thirty-six cases out of the hundred, and would appear to have important relations to uterine disease. The general inference, then, deducible from these facts, is, that uterine disorder is for the most part preceded by constitutional derangement, and that this is more especially referable to the nervous system, the digestive organs, and the blood; and that various morbid conditions in respect of these present themselves, either as complications or concomitants of most uterine affections.

But let it be understood, that however uterine disorder has arisen, it may continue long after the exciting causes shall have passed away; may assume the character and importance of an idiopathic affection; and, as such, be the cause of various secondary disorders. A healthy female, for instance, receives a severe fright during menstruation, which is immediately followed by suppression, and this may continue for some time, even for months: here the disturbing cause was evidently mental, momentary, and transient,—not so the effect; and this, so long as it continues, may be a source of embarrassment to the constitution, and the immediate cause of secondary disease of other organs, which again, by reacting upon the uterus, would tend to perpetuate or maintain a state of irritation which is unfavourable to the return of healthy functional action. But in other cases, uterine derangement originates in causes of a more permanent nature, as in the instance of disorder of the chylopoietic organs; which, whilst on the one hand a prolific cause of it, is on the other, often a persistent malady,—often continuing for years, and that, too, in despite of every available mode of treatment. Now, should the uterine organs fall into a state of irritation or disorder, as a consequence of this, it must follow that such irritation or disorder will be equally protracted and difficult of cure:—nay more,

vascular disease will sooner or later supervene upon such irritative disorder, and thus increase the difficulties of the case, independently of its being aggravated and perpetuated by the continuance of its original cause. These circumstances show the necessity of regarding uterine diseases in a comprehensive manner; but they do not militate against the correctness of the views which I have ventured to express, and which I shall now proceed to illustrate.

THE ORIGIN OF UTERINE DISEASE FROM DISTURBED STATES OF THE NERVOUS SYSTEM must be generally admitted, and every practitioner must be cognisant of cases in which it has arisen from such causes. Severe mental emotion, shock, or affliction, will, it is well known, give rise to painful uterine affections, to interrupted, excessive, or irregular menstruation, miscarriage, or premature labour; and if such consequences follow such causes, it is reasonable to conclude that causes of a similar but less violent nature will equally give rise to slighter but no less certain deviations from normal uterine action. This, indeed, is in reality the case, and many instances of uterine disease may be traced to the continued influence of grief, anxiety, and other uneasy states of mind. But the nervous system may be disturbed in many other ways, by various pursuits, by residence in an unhealthy situation, by insufficiency of food, over fatigue, and other physical causes, which tend to depress the constitution and lower the tone of the nervous system. And here also the uterine organs may suffer; for in whatever way nervous influence is withheld, whether from defective or irregular supply, such parts being inadequately supplied with nervous energy, will either take on irregular actions, or become morbidly susceptible to disturbing influences.

The recent researches of Dr. Robert Lee, in regard to the nerves and ganglia of the uterus, are of extreme interest in a practical point of view, as tending not only to show how great is the amount of nervous energy possessed by that organ, but as serving to explain the cause of that intimate sympathy which exists between it and other organs of the body, a circumstance upon which so much of its physiological as well as pathological conditions depend. It would not be inconsistent with the views of modern physiologists to attribute to those ganglia and nerves important bearings upon the subject of uterine pathology, regarding them as we must as nervous centres, which, under the influence of certain stimuli, give rise to corresponding actions, either conducive to health or disease, according to the character of the impressions which are received. In speaking of the nervous ganglia generally, a recent writer observes, "that they are nervous centres, which probably receive through afferent fibres impressions of which we are unconscious, and reflect these impressional stimuli upon afferent motor fibres; that perhaps motorial stimuli emanate from them; the movements excited by, or through the ganglia, being always involuntary, and affecting chiefly the muscular parts of the viscera, the sanguiferous, and perhaps absorbent vessels, and that in fine, the chief purpose served by the ganglia and ganglionic nerve fibres, is to govern the involuntary, and, for the most part, imperceptible movements of nutrition, so far at least as these movements are not dependent upon the brain and spinal cord."¹

¹ QUAIN'S *Anatomy*; Edited by Dr. Sharpey and Mr. Quain, p. cccxiii.

Consistently with these views, then, it may be assumed, that so long as the uterine ganglia receive, through afferent fibres, impressions of a normal character, so long will normal ganglionic actions ensue, giving rise to healthy uterine action, both in regard to function and structure; whilst on the other hand, impressions of an abnormal character will excite ganglionic actions equally subversive of both. The *modus operandi*, then, of disturbed states of the nervous system, irritative conditions of the nervous centres, and disorders of remote organs, in the causation of uterine disease, is either by the uterine ganglia participating in such states of disorder, or receiving impressions which tend to morbid actions. Regarded, then, in this point of view, we cannot be surprised that the majority of causes which tend to uterine disturbance should have a constitutional rather than a local origin; for whatever impressions are made upon the body, whether through the mind or otherwise, which are capable of being reflected upon the uterine ganglia, and are calculated to excite morbid actions, are so many ways in which uterine disorder or disease may be induced. Examples of this occur in all uneasy states of mind, in irritative disorder of organs with which the uterus has sympathetic relations, and in abnormal conditions of the blood; and if it is the case that uterine disturbance most frequently arises from such causes, it cannot be expected that it should cease, so long as the conditions upon which it depends continue.

In connexion with the nervous system, there is no subject of greater interest or importance than the influence of the mind, or rather of certain uneasy or emotional states of mind, in giving rise to uterine derangements; and there is none which it is more necessary to study and appreciate fully in all its bearings. In regard to pregnant women, the effect of sudden or severe emotion has been often of a very serious nature; such as the death of the *fœtus in utero*, many alarming sensations, and abortion, miscarriage, or premature labour, according to the period of pregnancy. Should the child's life be spared, it has been born deformed, idiotic, maimed, or disfigured, whilst parturition itself has been seriously compromised. These circumstances are, however, well known to the profession, and need not be illustrated by any particular instances. But the effect of severe mental emotion upon the non-pregnant female is often equally serious, although less frequently observed; and there is scarcely a functional disorder of the uterus which may not, and has not been, occasioned by it. Thus Baudelocque reports that sixty-two women were attacked with uterine hæmorrhage, or suppressions, upon the occasion of the explosion of the powder magazine of Grenelle. M. Husson gives the case of a woman who, at several different times, was attacked with menstrual suppressions under the influence of claps of thunder. M. Colombat observed, in July 1830, that the reports arising from the platoon firing and cannon shot produced the same effect in several women. He also states, that a relation, whose menstruation was ordinarily very regular and abundant, was attacked with a sudden suppression, in consequence of a frightful dream, a kind of nightmare. With regard to menorrhagia, again, it is well known, that all circumstances capable of imparting a sudden shock to the enervation, such as joy, grief, anger, fright, have been its causes: and M. Alibert relates the case of a female who,

whenever she gave way to transports of passion, was attacked with violent hæmorrhage from the uterus (see Meigs *on the Diseases of Females*). I have myself reported cases in which hystericalgia arose from sudden fright.

But the influence of less violent perturbations of mind, of anxiety, grief, affliction, etc., although productive of less marked results, are equally the cause of many uterine maladies; and although such states of mind in themselves do not admit of a direct cure by medicine, it is yet possible to do much by studying the nature, order, and sequence of the morbid actions to which they give rise. In some cases of this kind, the uterine organs would appear to receive a direct impression from the brain of a disturbing character, and uterine derangement to follow, without the intervention of any other organ or agency; and this is especially the case in the instance of sudden shock or emotion. But in other instances, and more particularly where the mental affection has been of a less violent nature, it would seem that other organs were disturbed, either concurrently with the uterus, or altogether independently; and the consequences differ accordingly. In the first of these cases, it will generally happen, that the uterine disorder, and that concurrently produced, will reciprocally react upon one another; and this reciprocal reaction, while it gives increased intensity and persistency to each, will at the same time disturb the constitution in a proportionate degree. In the second case, where the mental uneasiness, etc., is principally or entirely reflected upon some organ, it will often happen that the disorder thus produced will become the immediate cause of uterine derangement, either by a sympathetic or reflected operation; and in this respect it has appeared to me, from many facts which have come under my observation, that the spinal cord, or rather its ganglia, have important relations to uterine pathology. Spinal irritation is, as I believe, a frequent consequence of mental uneasiness, shock, or emotion, and at the same time, when so produced, a frequent cause of uterine disturbance; and it is to spinal irritation thus induced and productive of uterine disorder that I would more particularly wish to draw attention, as exemplifying in one form the relations which exist between uterine and constitutional disorder.

The existence of spinal irritation as a distinct and idiopathic affection, whether dependent upon mental or other causes, has been altogether denied by some writers, while it has been doubted by others. In speaking of it, Dr. Abercrombie remarks, that "it may be doubted whether it conveys any definite notion, or whether it is not to be considered as a gratuitous principle assumed so as to answer to the phenomena, rather than deduced from observation". But, with all the deference and respect due to so high an authority, it must be added, that the truth of the doctrine has been affirmed by many eminent practitioners, and so many facts have been accumulated in support of it, that it is impossible to doubt its reality, however difficult it may be of explanation. I shall, in the first place, state the grounds upon which I consider it entitled to be ranked as a distinct affection, and then those which point to its connexion with mental causes on the one hand, and uterine derangement on the other.

The subject of spinal irritation was first noticed by Mr. Pleyer, of

Malmesbury, in the twelfth volume of the *Quarterly Journal of Science*; and his attention would appear to have been first directed to it, from observing that the symptoms of spinal disease frequently resemble various and dissimilar maladies, and that commonly the function of every organ is impaired whose nerves originate near the seat of disorder. The occurrence of pain in distant parts particularly attracted his attention, and induced frequent examinations of the spinal cord, and the results of his investigations is given in the following words: "After some years' attention, I consider myself enabled to state, that in a great number of diseases, morbid symptoms may be discovered about the origins of the nerves which proceed to the affected parts, or of those spinal branches which unite with them; and that if the spine be examined, more or less pain will commonly be felt by the patient on the application of pressure about or between those vertebræ from which such nerves emerge. If disease is confined to one side of the body, or one arm, or one leg, this tenderness will be felt on the *same side* of the spine *only*; but if central parts, or *both sides* of the body, or both arms or legs, are diseased, tenderness will be felt on *both sides* of the spine. This symptom has been found to attend various other affections. This spinal affection may, perhaps, be considered as the *consequence* of diseases, but of its existence at their *commencement* any person may satisfy himself; and this circumstance, combined with the success which has attended the employment of topical applications to the tender parts about the vertebræ, appear to indicate that the *cause may* exist there."

The correctness of these observations has been attested by many subsequent writers, and more particularly by Dr. Brown, Dr. Darwall, Mr. Teale, and the Messrs. Griffin, the latter of whom have given us the result of their investigations upon the subject in a work on the functional affections of the spinal cord and ganglionic system of nerves, which contains the most complete and elaborate account of the phenomena resulting from spinal irritation that has yet been published. More recently the matter has been treated of by Dr. Todd, in an article in the *Cyclopædia of Practical Medicine*, and he has endeavoured to show that anatomy affords some support to the doctrine. He particularly insists that it is unfair to deny the previous existence of compression, or irritation of the spinal cord, or of the spinal nerves at their origins, because the anatomist cannot detect any vestige of disease after death; he points out that the spinal cord and the nerves which emerge from it, are surrounded by a venous anastomosis of remarkable complexity, that these veins do not possess valves, that they communicate freely with the superficial veins and with the numerous muscular veins in the region of the back; and from these anatomical considerations he infers, that such a degree of congestion or turgescence of this spinal venous plexus may easily occur as will excite irritation at the origins of the spinal nerves, and that such congestion may exist *ante mortem* without leaving any trace of it *post mortem*. These facts certainly meet many of the objections which present themselves to the reception of spinal irritation as a distinct pathological affection. For, if spinal congestion is so ready a consequence of irritation of the cord, the phenomena it presents, and its mode of causation, do not essentially differ from the usual consequences of irritative

disorder of other organs. The doctrine of venous congestion, as explanatory of the phenomena of spinal irritation, accords well with many pathological facts which have been observed in connexion with it. Thus it is most frequently met with in persons who are weak and anæmiated, in those whose general health has been impaired, and thus in those in whom the circulation must be languid and favourable to the occurrence of venous congestion. It is at the same time most successfully treated by measures which improve the health, the tone of the nervous system, and the vigour of the circulation.

But, notwithstanding these circumstances, there are many who deny the existence of spinal irritation as a distinct pathological affection, and regard it, when present, rather as an accident or a casualty than as an independent lesion; and it must be admitted that it is difficult to establish the affirmative of this question; first, because the exact nature of spinal irritation has not, as yet, been satisfactorily determined; and secondly, because *post-mortem* examinations have not hitherto thrown any light upon it. But these objections do not appear to me to be by any means fatal to the doctrine; for there are many diseases, and more especially of the nervous system, the reality of which cannot be doubted, the nature of which is yet obscure, and in regard to which *post-mortem* investigations have elucidated nothing. Let us look, for instance, to tetanus, hydrophobia, and some forms of epilepsy. This spinal affection, moreover, is admitted to be functional, to be one which does not lead to fatal consequences, and therefore one the nature of which cannot be determined by *post-mortem* inquiries. But admitting these difficulties, it may be replied, that the history of these cases, their symptoms, and more particularly the effect of remedies, point conclusively to the reality of spinal irritation as a distinct pathological condition. A female, perhaps in delicate health, receives a sudden fright or shock, which is followed, either immediately or remotely, by uterine symptoms. The spinal column is examined, and tenderness found in the lumbar or sacral region: possibly no other organic lesion is discoverable: and in this case the application of a sinapism or of some other counter-irritant to the tender portion of the spine is followed by a cessation of the uterine symptoms, without any other kind of treatment. Here it must be obvious, that some state of the spinal cord existed, upon which the uterine malady depended, unless, indeed, such an occurrence were rare and accidental. But that it is not so, is proved by the frequency with which such cases are met with; and of which I subjoin the following as examples.

CASE. Mary Ann Davies, aged 20, a healthy young woman, rather more than eight months advanced in pregnancy, received a sudden fright, on the 18th September; labour pains came on shortly afterwards, and, at half-past two the next morning, she was safely delivered of a living child. She went on very well after her labour for the first twenty-four hours, but afterwards became feverish, her digestive organs disordered, and she was seized with severe pain in the uterus, which had continued for many hours persistently before I saw her. On examining the spine, there was well-marked tenderness in the lumbar and sacral region. A sinapism was directed to be applied to this part, and the uterine pain disappeared shortly afterwards. The only medicine given was an alterative dose of blue pill.

CASE. Ann Keane, aged 20, had nearly reached her full period of pregnancy, when she was frightened: no particular symptoms occurred for some days, but on the eighth day uterine hæmorrhage took place; this was not found on examination to be connected with placental presentation, nor had the labour apparently commenced. After continuing for six hours rather profusely, it ceased; and twenty-four hours afterwards labour came on, and she was in about eight hours safely delivered of a healthy child without any particular loss of blood. Some hours after this, she complained of much uterine uneasiness, and on examining the spine, it was found very tender in the sacral region. The uterine pain disappeared on applying a sinapism, and there appeared to be no other cause for it or the hæmorrhage than the irritable state of the spine.

CASE. Harriet Benjou, aged 19, applied at the Paddington Free Dispensary, suffering from amenorrhœa and leucorrhœa; the former was brought on by a fright, and since the suppression she had suffered from headache and nervous symptoms, with much derangement of the stomach and digestive organs. On examining the spine, there was decided tenderness in the lumbar and sacral regions; tartar emetic ointment was directed to be rubbed over the tender part, and, after four or five applications, a good deal of cutaneous irritation was produced, which was immediately followed by cessation of the leucorrhœa.

Mr. Teale, in his treatise on neuralgic diseases, gives several cases of an analogous though more general character, of which the following may be quoted.

CASE. Mr. L., aged 26, complained of a feeling of indisposition, having suffered for a few days from stiffness in the neck and pain at the back of the head, extending laterally to the ears and upwards over the back part of the scalp; he perspired much at night; felt languid and unable to attend to business; about four weeks before, he was exposed to wet and cold, and had ever since been affected with these symptoms. On pressing the spine, there was tenderness over the first cervical vertebra, but no pain was produced by firm pressure upon any other part of the spine. Leeches were applied to the neck; and it was stated that the pains in the scalp were immediately relieved on their application.

CASE. In another case, a lady, a week after her confinement, complained of pain in the head, occurring in the afternoons in a violent degree. It was described as a dull aching pain, principally seated in the occipital region, but extending from that part over the parietal bones; towards the temples, and in the neighbourhood of each ear, there was a small space more acutely painful than the rest. There were also pains darting over the scalp and along the upper part of the neck. She complained of violent pulsating sensations in the head, accompanied with distressing sounds, which she compared to the beating of hammers. Leeches had been applied to the temples, but without benefit; the spine was examined, and it was found extremely tender over the two upper cervical vertebræ. Leeches were applied to this spot, and it is reported that they gave immediate relief, and that no further return of the paroxysms was experienced.

Such cases as these are sufficiently simple, and for the most part require only that proper measures should be directed to the spine to

effect a cure. But it more frequently happens that spinal irritation is met with in conjunction with disorder of some other organ, which equally tends to keep up uterine derangement, and thus equally requires to be looked for and corrected. In this respect, derangement of the digestive system is a very frequent concomitant, and would appear to have a similarity of origin in many instances. In this case, if the concomitant affection is not duly attended to, any measures directed to the spine will fail of their anticipated benefit. The following cases illustrate this connexion and the results of treatment.

CASE. Elizabeth Brown, aged 31, when about four months advanced in pregnancy, received a severe fright, which occasioned her almost to faint away. From the date of this occurrence, she began to feel many uneasy feelings in the stomach and womb, such as she had never had before in any of her six previous pregnancies. At times her sensation was that of extreme distension of the abdomen, as if it would burst; at other times she felt severe uterine pains, with occasional forcing sensations extending to the hips, back, and thighs. The digestive organs were much disordered, the tongue was unpleasant on awaking of a morning, the appetite was uncertain, and the bowels were sometimes costive, and at other times relaxed. On examining the spine, there was well-marked tenderness over the sacral region; indeed, pressure here brought on pain in the uterus. She was directed to apply sinapisms daily to the region of the sacrum, and mild alteratives with aperients were prescribed. In little more than a week her uneasy feelings had all subsided, and there was every probability of her going on favourably with her pregnancy.

CASE. Margaret Nadauld was attended, October 1, 1850, suffering intense pain in the uterus and left iliac region. The pain was of a very excruciating character, was increased by the least pressure over the uterus externally, and the slightest touch of the cervix was attended with great suffering. There was a great deal of febrile disturbance, a quick pulse, hot skin, furred tongue, thirst, and disordered bowels. The lower part of the spine was extremely tender, and on pinching up the skin of the left iliac region, the patient evinced much suffering. The history of the case showed that it had originated in a fright, which the patient had had a few days before. She was directed to have a linseed-meal poultice applied over the hypogastrium, and a sinapism to the lower part of the spine. One grain of calomel, and five of Dover's powder, were to be taken every four hours, until three doses had been taken, and on the following morning as much castor oil as would insure a full action of the bowels. The next day, the symptoms were all abated; and, so far as the immediate attack was concerned, the patient considered herself to be convalescent.

CASE. Emma Portsmouth, aged 28, unmarried, applied at the Paddington Free Dispensary under the following circumstances. She had been suffering from profuse and almost constant menorrhagia for a period of eight months, during which period, she had been scarcely a week free from some kind of sanguineous discharge from the uterus, and had very often passed clots of blood. At times she had severe uterine pain, and a sensation of bearing down with leucorrhœa, and much pain in the back. These symptoms had been preceded by general weakness and ill health, and much disorder of the stomach and digestive organs. She had also undergone a great deal of anxiety and trouble, to

which she attributed her bad health and uterine maladies. When admitted, she was suffering from the consequences of anæmia in a severe form, very marked dyspeptic symptoms, and the lower part of the spine was exquisitely tender; there was almost constant metrorrhagia and leucorrhœa when this was absent. In the first instance, the treatment adopted was the exhibition of the acidulated muriated tincture of iron, with drachm doses of the solution of the bichloride of mercury; but as in a week she was not materially better, and as the tenderness of the spine was very marked, she was directed to rub the lower part of it freely with the tartar emetic ointment night and morning, until pustulation took place. In a week from this period she is reported to be much better, and I find the following entry: "Is much better, looking better, hæmorrhage less, tongue cleaner, appetite improved, leucorrhœa less, feels stronger." Three days afterwards the following entry was made: "Is much better; no hæmorrhage, leucorrhœa less, no uterine pain, reports that she has very much improved since pustulation has taken place over the spine." This patient entirely recovered under this mode of treatment, but it is unnecessary to give the particulars of the case any further.

CASE. Mary Johnstone was attended in November, 1850, suffering from much uterine pain, profuse leucorrhœa, and irregular menstruation. She had been out of health before any uterine symptoms had appeared. She had undergone much anxiety and trouble, the tongue was habitually dry and unpleasant, and she felt low, nervous, and depressed. She had been married two years, but had no children; there was extreme tenderness of the spine in the lumbar region, she was anæmiated, and her digestive organs were much disordered. The tartar emetic ointment was directed to be rubbed over the lower part of the spine night and morning, until pustulation took place, and she was ordered the acidulated muriated tincture of iron, with drachm doses of the solution of the bichloride of mercury three times a day. After pursuing this treatment for four weeks, she is reported to be perfectly well; to have no uterine pain or leucorrhœa, the tongue perfectly clean, and the digestive organs healthy. She especially mentioned, that the uterine pain and leucorrhœa ceased upon pustulation taking place over the tender part of the spine.

These cases appear to me to be sufficient to establish the truth of the doctrine for which I am contending; viz., that spinal irritation exists as an independent affection, and, as such, may be the cause of various secondary uterine disorders. In the first group of cases, we see it connected with symptoms which entirely disappear without any specific treatment, simply by attending to the morbid condition of the spinal cord. In the second, we find it coexisting with chylopoietic disorders, and together with these the cause of various uterine maladies, which again disappear without special treatment, on correcting the spinal affection concurrently with the derangement of the chylopoietic viscera. But it may be supposed that I have attached too much importance to the spinal affection in this latter group, and too little to the gastrointestinal as a cause of uterine disorder; and with the view of meeting this remark, I subjoin two cases, in which every treatment that appeared to be indicated was adopted, and failed, until the spinal affection had been recognised and remedied.

CASE. Mrs. R. B., a lady of extremely nervous temperament, was

attended by me in her second confinement on Dec. 12, 1841. The labour was comparatively easy, and over in a few hours: no unfavourable circumstance occurred either during or subsequently to it, and, up to the 18th December, her progress was as satisfactory as could be wished. She began then to suffer from nervous symptoms, her sleep was broken, her tongue and digestive organs were disturbed, and slight febrile symptoms showed themselves. She had also pain and uneasiness in the uterine and left iliac regions; not at first persistent, but rather recurring at intervals: pressure over these parts gave increased pain. Dr. Ferguson, who was consulted on account of these symptoms, attributed them to a mild attack of puerperal fever, observing that he considered that there was congestion of the left ovarian ligament. Eight leeches were applied to this part, and subsequently warm linseed poultices. At the same time, small doses of grey powder and Dover's powder were given at intervals of four or six hours. The local pain and uneasiness were relieved by these measures, and, upon the whole, the case appeared to be going on favourably: but after some days had elapsed, there was still a greater degree of irritability of the constitution observed than is usual, the pulse continued quick, and the digestive organs were still somewhat disordered. Part of these symptoms were attributed to her extremely nervous temperament, and we had every expectation of their subsiding; but instead of this, a week after the treatment had been commenced, we were surprised by a sudden return of all the uterine symptoms, in a severe form; with them the pulse rose, and there was much constitutional disturbance. The abdominal pain was very acute, and aggravated by the least pressure. The sudden return of these symptoms suggested a doubt as to their inflammatory nature, and this was strengthened by the result of my inquiries. It appeared that some weeks before her labour, she had lost a near relative, whose death affected her very painfully; from that time she became subject to uneasy feelings in the left side of the abdomen, and the return of the uterine symptoms appeared to have been immediately caused by her seeing the monthly nurse fall while carrying her infant. The spinal column was examined, and there was extreme tenderness at the commencement of the lumbar vertebræ, and this was so intense that she completely started under the pressure of the finger. These circumstances were reported to Dr. Ferguson, who approved of topical counter-irritation over the tender part of the spine. Nothing but a sinapism was employed, but it succeeded in removing all her symptoms. The uterine pain subsided, as did also the constitutional disturbance, and she rapidly got well. She has since been twice confined, and on each occasion has done well.

CASE. Elizabeth Loughborough, aged 25, applied August 6th, 1850, suffering from anæmia and dyspeptic symptoms, together with leucorrhœa; she had acute pain at the epigastrium; the tongue was dry and furred, and her appetite was bad; she had also pain at the back of the head, and felt giddy and faint; she menstruated regularly, but with pain, and she suffered much from leucorrhœa. Her illness had been preceded by mental agitation, and to this she attributed it. For these symptoms she was, in the first place, treated with alterative doses of blue pill, at bed-time; with the citrate of iron, and sesquicarbonate of ammonia, during the day. At the end of a fortnight, she

was not materially better, and still complained of severe pain at the epigastrium. The chlorate and nitrate of potass were now added to her mixture, and they were directed to be taken in effervescence with the citrate of iron. At the end of another week, she was still complaining of the epigastric pain; her digestive organs continued in a very irritable state, and upon the whole she was very little better. An examination was now made of the spine, and exactly corresponding horizontally with the pain at the epigastrium, it was found to be very tender upon pressure. The tartar emetic ointment was ordered to be rubbed over this portion of it, night and morning, until pustulation took place; no change was made in her medicines, and four days subsequently she reported herself to be very much better. The pain at the epigastrium was nearly gone, she felt generally stronger, and the leucorrhoea has almost ceased. From this time she rapidly improved, and was soon convalescent.

It appears to me impossible to reconcile the facts of these cases in any other way than by admitting the doctrine of spinal irritation as a distinct and independent affection; and although post-mortem investigations are wanting to inform us of the precise nature of the affection, the existence of some morbid condition of the cord or its ganglia, in such cases, is conclusively shown by the results of treatment. Nor is this doctrine by any means irreconcilable with well-established physiological facts: it is now, I believe, generally admitted, that the spinal cord is to be regarded rather as a series of nervous centres than a single organ; that from these centres emanate the nervous actions of corresponding parts of the body; and that one or more of these ganglia may be disturbed irrespectively of others. Now in this latter case it will follow, that the disorder of any given portion of the medulla will be principally evinced by disorder in those organs or parts which are supplied with nerves from the particular parts or ganglia which are affected; for as a general rule, it is found that disease of the nervous centres is less indicated by morbid phenomena in the immediate seat of the disease than in those organs or parts to which the nerves arising from them are distributed. This is certainly so in regard to structural diseases of the spinal cord and brain; and in cases where the trunks of nerves have been compressed or disorganised, the effects are less shown at the immediate seat of these lesions, than in those parts to which these filaments are distributed. In the more severe forms of disease, this principle, as observed by Mr. Teale, is readily admitted and recognised; and when, for instance, one half of the body shall have lost its sensibility, and the corresponding muscles their power of action, we look at once to the brain as the immediate seat of the disease. But in the slighter forms of disease of the brain and spinal cord, such as do not obliterate, but merely impair or pervert the functions of the nerves, this important principle, which is as strictly applicable here as in the former case, is too often entirely overlooked; and a numerous class of complaints are regarded as local affections, instead of being considered as actual diseases of that portion of the brain or spinal cord from which the nerves of the part are derived. I might support the correctness of these views by adducing numerous cases which would show how efficacious had been the effect of remedies directed to the spine, where treatment perseveringly ad-

dressed to the seat of pain or uneasiness had been altogether useless. But this would carry me beyond the scope and limits of this paper.

In the next place, I have to consider how far spinal irritation is a consequence of mental uneasiness on the one hand, and the cause of uterine disorder on the other. On looking to the foregoing table, I find that thirty-six cases are referred to in it, in which uterine disease had been preceded by, and was apparently connected with mental causes; and of these it was found that spinal irritation existed in seventeen, in a decided manner; whilst in five only was it met with independently of such causes. It should be added, however, that it may have existed in a larger proportion than this. But as the majority of patients were not so ill as to be confined to bed, the examination of the spine was generally made over their dress, and the result was consequently less accurate than could have been desired. To elucidate the point further, I have made the following analysis of twenty-six cases of spinal irritation, which occurred in connection with uterine disorder, giving their probable causes, and the nature of the concomitant affection.

Spinal Irritation.		
Case.	Antecedents.	Concomitant Uterine Malady.
1	Bad health, dyspepsia.	Dysmenorrhœa.
2	Anxiety, hysteria, dyspepsia, and weakness.	Hysteralgia, dysmenorrhœa.
3	Anxiety, asthenia.	Hysteralgia, fibrous tumours.
4	Anxiety, hæmorrhage post partum, great debility.	Hysteralgia, dysmenorrhœa, profuse leucorrhœa.
5	Anxiety, dyspepsia, bad health.	Hysteralgia, dysmenorrhœa.
6	Anxiety, bad health.	Hysteralgia, leucorrhœa.
7	Fright, general weakness.	Acute hysteralgia.
8	Mental emotion, delicate health, pregnancy.	Uterine and ovarian disease, simulating puerperal fever.
9	Mental uneasiness, dyspepsia, bad health.	Hysteralgia, dysmenorrhœa.
10	Anxiety, dyspepsia, bad health.	Menorrhagia, leucorrhœa.
11	Anxiety, bad health, extreme weakness.	Amenorrhœa.
12	Weakness, depression, and general ill health.	Hysteralgia, leucorrhœa.
13	Anxiety and trouble, bad health, weakness, depression, dyspepsia.	Hysteralgia, dysmenorrhœa, leucorrhœa.
14	Mental uneasiness, dyspepsia.	Hysteralgia.
15	Anxiety, dyspep., 5 difficult labours.	Hysteralgia, dysmenorr., leucorr.
16	Anxiety, bad health, dyspepsia.	Hysteralgia, menorrhagia, leucorr.
17	Bad health, weakness, dyspepsia.	Hysteralgia, menorrhagia, leucorr.
18	Weakness, depression, anxiety, and over fatigue.	Hysteralgia, leucorrhœa.
19	Dyspepsia, intestinal derangement.	Hysteralgia, leucorrhœa.
20	Bad general health, weakness.	Dysmenorrhœa, leucorrhœa.
21	Great mental anxiety, dyspepsia.	Carcinoma, metrorrhagia.
22	Mental anxiety, dyspepsia.	Hysteralgia.
23	Fright.	Hysteralgia, leucorr., dysmenorr.
24	Over fatigue, want of sleep, extreme debility, nervous symptoms.	Amenorrhœa.
25	General bad health, dyspepsia, fright.	Hysteralgia, leucorrhœa, irregular menstruation.
26	Mental trouble, excitement, dyspep.	Leucorr., irregular menstruation.

From this table it would appear, that of the twenty-six cases, twenty had been preceded by mental uneasiness, shock, fright, or agitation of some kind. This is a large proportion, but not larger than, I believe, really obtains in the instance of well marked cases of spinal irritation; and the conviction that such causes lead to this affection is so strong on my mind, that I would suggest a careful examination of the spine in all cases where they have preceded uterine symptoms. That such states of mind should affect the medulla spinalis in the manner supposed, is rendered at least probable by what occurs in other cases. As the result of violent or sudden emotion, we know that the functions of the cord throughout may be disturbed; as is shown in the case of chorea, a disease especially of the spinal system, and of which the most frequent exciting cause is sudden fright. Some cases of epilepsy may also be referred to in support of this view; and if it is the fact that violent or sudden mental impressions should give rise to general disturbance of the spinal cord, it appears to me reasonable to conclude that less vivid impressions, such as various uneasy states of mind, should also affect it and give rise to irritation of a more subdued but more persistent character. The influence of such mental causes in tending to the production of functional disorders of the spinal cord, is further rendered probable by other considerations. Thus this affection is for the most part met with in weak, anæmiated, and delicate persons. Dr. Taylor, of Huddersfield, who has paid great attention to it, informs me, that it is his opinion that spinal irritation may arise from any cause which reduces the general strength, and that nothing more than this is necessary for its production. Regarded then in this point of view, mental uneasiness or anxiety would be quite adequate to account for it, by its depressing influence upon the constitution and the general health. Again, it has been conjectured by some who have investigated the subject, that the phenomena immediately depend upon congestion of the spinal venous plexus; a circumstance which would also be favoured by the causes in question, nothing being more calculated to depress the tone of the nervous system, or the vigour of the circulation, and thus to give rise to venous congestion, than continued anxiety or uneasiness of mind.

But, in the last place, the question occurs; If it be admitted that the causes in question can so affect the spinal cord as to give rise to functional disorder of it, can such disorder give rise to uterine derangement, as I have supposed and represented? To this question, I have no hesitation in giving an answer in the affirmative. The cases I have related point in their history to this conclusion, analogy is alike in favour of it, and it is impossible to reconcile the results of treatment with any other view. Nor do I think that any one who has carefully investigated the subject can arrive at any other conclusion. It is quite true, that we cannot always determine whether the uterine or the spinal affection has the priority, because we have not often the opportunity of investigating this point at a sufficiently early period of the case; but some who have had this opportunity, affirm that spinal irritation exists at least from the commencement of such cases. Thus Mr. Player remarks (*Quarterly Journal of Science*, vol. xii, p. 429):—
 “This spinal affection may perhaps be considered as the *consequence*

of diseases; but of its existence at their commencement any person may satisfy himself, and this circumstance, combined with the success which has attended the employment of topical applications to the tender parts about the vertebræ, appears to indicate that the *cause* of such diseases may exist there."

Very similar views have been expressed by other writers upon this subject. In treating of it in a paper published in the *Midland Medical and Surgical Reporter*, for May 1829, Dr. Darwall enumerates many of the symptoms with which spinal irritation is attended, and observes, that the most common disturbance met with in connexion with it is in the uterine functions,—that he had scarcely seen an instance of it in which this had not occurred. Most commonly, he says, there is menorrhagia; in some few cases the catamenia are diminished, or they are completely suppressed; but whether they are increased or diminished, leucorrhœa almost invariably attends, and is generally more or less profuse, in proportion to the duration of the general disorder. When the catamenia are profuse, they are usually in the earlier part of the period dark-coloured and grumous. At p. 88 of his interesting work on neuralgic diseases, Mr. Teale gives the particulars of a case, in which considerable uterine disturbance coexisted with much derangement of the general health, and more particularly of the chylopoietic organs, in which the spine was tender throughout, and where treatment directed to this condition proved eminently successful. Dr. Griffin informs us, that painful affections of the uterus dependant upon irritation of the lumbar portion of the cord, are of much more frequent occurrence than any previously mentioned; and he refers particularly to hysteralgic affections, to dysmenorrhœa, to menorrhagia, and amenorrhœa. Of dysmenorrhœa, he says, that patients subject to it are also very often the subjects of general irritation of the spine. Menorrhagia and amenorrhœa he describes as less doubtful results of this state, the former being exceedingly common. Mr. Burns, of Glasgow, has written a valuable paper on the subject of spinal irritation, and has especially drawn attention to the connexion which exists between sacral tenderness and painful conditions of the uterus and bladder; and Mr. Tate has published a small volume on the coincidents of spinal tenderness with hysteria generally, and has given several cases illustrative of the benefit which has resulted from counter-irritation over the spine by means of the tartar emetic ointment.

With regard to the particular forms of uterine derangement which are met with in connexion with this affection, I find, on referring to the twenty-six cases which I have tabulated, that—

Hysteralgic affections occurred in	18	Amenorrhœa in	2
Dysmenorrhœa in	9	Leucorrhœa in	13
Menorrhagia in	4	Menstruation was irregular in ..	2

But these affections were variously associated in different individuals: a fact which of itself would almost point to a constitutional origin. The predominance of hysteralgia is very striking, and has been noticed in general terms by other writers. It also favours an opinion which I formerly ventured to express upon more general data, that impressions made upon the uterine organs, from or through the cerebro-spinal system, rather give rise to painful and uneasy conditions, whilst those received from or through the medium of the ganglionic system

of nerves, rather give rise to functional disorders in regard to nutrition and secretion. It is, however, necessary to bear in mind, that the causes of uterine disease are, for the most part, of a complex nature; that the cerebro-spinal and the ganglionic system of nerves are often concurrently disturbed, and that they thus reciprocally react upon the uterine organs, so as to give rise to very mixed and complex forms of derangement.

But spinal irritation, although I believe it to have important relations to uterine pathology, must not be supposed to constitute the sole medium by which nervous derangement is conducive to uterine disease; nor is it a consequence solely of such mental conditions as have been referred to. It may arise from depression of the general health, impoverished states of the blood, and various local irritations reflected upon the medulla. And uterine disorder may arise altogether independently of spinal irritation or mental influences. Whatever indeed tends to depress, disturb, or to embarrass the actions of the nervous system, will either directly or remotely produce it. For it is an admitted axiom, that the healthy performance of every organic function is dependent in a great measure upon the integrity of this system, the due generation of nervous energy, and its proper distribution to the several organs of the body. But none are so liable to suffer from a defective or irregular distribution as the uterine;—there are none which sympathize more largely with the constitution or the nervous system in its several physiological and pathological conditions. It is upon the uterine organs that all the impressions made upon the female organism, whether physical or mental, are either directly or indirectly reflected; and none are influenced so powerfully by the various affections and passions of the mind. Can it then be doubted, that in the mental phenomena, or rather in painful and uneasy states of mind, whether emotional or intellectual, we have a powerful and frequently operative source of uterine derangement, which it is important to recognise and to appreciate?

Nor can it be denied, that there are circumstances of an extrinsic character, which bear closely upon the subject under consideration,—circumstances which are connected with the social condition of the female, which give force and intensity to the operation of causes which might otherwise be harmless. It cannot for instance be doubted, that in the restraints, the refinements, and the education to which the female constitution is subjected as society is constituted, there are to be found important elements tending to the causation of disease. No class or grade of society possesses an immunity from social evils, whatever may be its social advantages. The more developed is the mind, and the more refined are the feelings, the greater will be the susceptibility of both to the influence of disturbing causes, and these are to be met with to a prolific extent in the anxieties and cares, the troubles, the disappointments, and perturbations of mind to which each in his social capacity is subject, and from which no class is exempt. It is true that the troubles of one person are not exactly the troubles of another, nor do those of one grade of society correspond exactly with those of another; but upon the whole, the actual amount of good and evil, of suffering and enjoyment, is pretty equally distri-

buted ; and accordingly we observe a great similarity in the diseases which prevail among different classes of the community, however opposite may have been the stations of different individuals, and however different may have been the causes, whether physical or moral, which may have co-operated to produce them.

But it may further be affirmed, that the treatment of uterine diseases cannot be successfully carried out if these circumstances are disregarded, or if the relations which subsist between the nervous and the uterine systems, in their physiological and pathological conditions, are overlooked. Mental affections are not, of course, susceptible of direct cure by medicine, but the physical disorders they give rise to frequently are, if properly investigated and treated ; and in this investigation, it is necessary to study attentively the order and sequence of the morbid actions which ensue. In this order and sequence, the affection of the spinal cord, which I have been considering, claims our especial attention, not only as forming an intermediate link between psychical and uterine affections, but as constituting, in many cases, a distinct pathological condition, calculated in itself to react injuriously upon the uterine organs, and the removal of which is absolutely necessary for that of the uterine malady. The treatment, moreover, of this condition, is sufficiently simple and successful when properly recognised. It comprehends little more than regularly repeated friction over the spinal column ; counter irritation, more or less active, over the tender portion, continued for longer or shorter periods, according to the persistency or acuteness of the spinal irritation ; while in extreme cases, a few leeches may be usefully applied to the seat of irritation when this is very acute. These measures, together with moderate and regular daily exercise, attention to diet and regimen, and such general hygienic measures as are calculated to improve the general health, appear to me to comprehend all that is necessary for the cure of spinal irritation considered as an abstract affection. Some writers have recommended cupping and continued recumbency, but I have never met with a case in which the free abstraction of blood would have been justifiable ; neither should I anticipate any benefit from continued recumbency. On the other hand, regular exercise has appeared to have been of the utmost service, and more especially when combined with change of air and scene, and such circumstances as operate agreeably on the mind.

The benefit which I have seen result in the treatment of uterine affections, connected with irritable states of the spine, from such simple measures as I have mentioned, leads me to regard the spinal affection as being in many cases an original lesion, and to differ from those who look upon it as being merely subordinate, or incidental to the uterine. And when writers speak of the derangements of the nervous system, of the various pains which are felt in the abdominal and pelvic viscera, of the sensations which are complained of in their neighbourhood, and point to remote disorders as the direct consequence of uterine irritation, and the symptoms by which uterine disease is denoted, I would venture to inquire whether they are not sometimes confounding with the uterine affection one which in its nature and origin is perfectly distinct ? I am, I confess, led to adopt the affirmative of this question, when I find that the history of these cases points in nearly

all to an antecedent disturbance of the nervous system; and I am strengthened in this view, when I observe the symptoms of uterine disease in some cases to disappear without any specific treatment, by simply directing remedies to the spinal cord and the nervous system generally. On the other hand, I am not induced to relinquish this opinion on finding that such measures sometimes fail of their intended object, because I know that the causes of spinal irritation are at the same time those of various associated disorders of other organs, which, together with that of the spinal cord, originate and maintain a state of uterine irritation and disorder. But I am above all convinced of the truth of the position which I have assumed, when I meet with cases in which these affections have co-existed with uterine derangement, and have been supposed to be dependent upon it, and where, conformably with this view, it has been sought to remedy them by the constant, repeated, and persistent, but unsuccessful employment of measures specifically directed to the uterine organs, for periods varying from one to two years, and this, too, by practitioners of authority and eminence.

(To be continued.)

Chester Place, Hyde Park Gardens, October 1851.

THE FIRST OF OCTOBER 1851.

By AN OCTOGENARIAN.

THE first of October is an interesting day to the medical profession: on it the different schools are opened, at which such acquirements and knowledge are to be obtained as will qualify the pupil to pass his examination at Apothecaries' Hall, at the College of Surgeons, or at the College of Physicians; and the public journals have announced more than twenty well-provided lecture-rooms, at colleges, hospitals, halls, and private institutions, where the necessary instruction may be acquired.

Anterior to the year 1815, few medical schools existed, and those were very incomplete, with the exception of those founded for anatomical and surgical teaching; but even upon these the attendance was not compulsory, and many persons practised as physicians, surgeons, and apothecaries, who had never attended a single course of lectures, or witnessed one dissection. In the year 1814, at the seven London Hospitals, namely, St. Bartholomew's, St. Thomas's, St. George's, Guy's, the London, Middlesex, and Westminster, there were only thirty-eight physician's pupils; in less than twenty years after the Apothecaries' Act passed, they increased to three hundred and twenty-six, and are now still more numerous.

The first important incentive to a more careful and appropriate medical education was effected by the privilege, granted by Parliament to the Society of Apothecaries in London, of electing a Court of Examiners, to inquire into the competency to practise medicine of all future apothecaries throughout England and Wales. This bill passed