in a chair," though I could discover none by palpitation there.

Some interesting speculations might be indulged, did time permit, as to the circumstances which led to the occurrence of gangrene in this case. What was the cause of the failure in the circulation? I am inclined to think that arterial degeneration had long previously been by degrees obliterating the main channels of vascular supply, and a low form of inflammatory action might also be set up in and around them. His sensations at the time of running down the hill, and subsequently, must be admitted to have arisen in connection with some lesion occurring there, possibly the rupture of a calcified vessel. A collateral circulation, however, is now performing its functions admirably, and affords an interesting example of nature's resources in this respect. His sensation of pulsation, when in the sitting posture, is so natural that it must be regarded as evidence as to the course by which the blood now reaches the extremity. I have only further to add, that the patient is at this moment enjoying as good health as he ever had in his life, although from a small exfoliation of dead bone from the tibia, not at present quite ready for his artificial foot.

ON THE MANAGEMENT OF WOMEN AT, AND AFTER THE CESSATION OF, MENSTRUATION.*

BY E. J. TILT, M.D.,

Senior-Physician to the Farringdon General Dispensary and Lying-in Charity, and to the Paddington Dispensary for Diseases of Women and Children

ON PURGATIVES.

AMONGST the vicarious diseases by which nature enables the system of women to right itself, diarrhoea is one of the most frequent; as it forms an immediate diverticulum for that periodic flow of fluid which has now outlived its utility; and as it is also the most convenient local depletion by which we can habitually relieve the system, the employment of purgatives at this stage of the menstrual function fully deserves the confidence which the profession has long accorded to the practice, and the sanction which Fothergill has given it in a well-known contribution to medical literature. The utility of purgatives has become so much a matter of popular, as well as of medical belief, that both patient and medical attendant too often confide in them alone, to the neglect of the other more important means I have already alluded to. This mode of treatment is one of nature's own suggesting, for it was found that diarrhoea occurred at cessation in the following number of instances:—

Diarrhoea existed in	...	...	...	12 per cent.
" was irregular in	...	...	...	8 "
" was regular, by coming on every	...	...	...	4 "
month in	...	...	...	4 "

I might give numerous cases in proof of the utility of this occurrence, but I will merely state the following:—

Case.—Catherine Mackey, aged fifty-three, tall, thin, with dark hair, grey eyes, and pallid complexion, was born in Ireland, but for the last thirty-five years has resided in London. She menstruated very abundantly at between fifteen and sixteen years of age, was regular from the first, and continued so for three or four days every three or four weeks, with so little suffering that "she never felt them come nor go." She married at thirty-three, miscarried three times, and bore five children, the last at forty-seven; and menstruation, which had been irregular a year previous to conception, never returned after that event. The patient was generally relaxed during the menstrual epochs. During her last pregnancy, and after her confinement, she frequently had three or four stools a day, without pain or loss of appetite, and since then diarrhoea has come on every three or four months, with intermittent flushes and drenching perspirations. For the last twelve months she has been relieved six or seven times a day, until lately, when she has only been so once in two days, and has ever since suffered from heat, and oppression at the pit of the stomach, from wind, nausea, and want of appetite, but her tongue is perfectly clean and healthy. I adopted the same treatment as in the previous cases; and when the action of the bowels became freer the patient got better.

By imitating nature to a certain extent, as in this instance, it is often in our power to cure the milder cases, and to prevent the return of the more serious diseases.

The utility of purgatives at cessation is further shown by the very intimate relation which I have proved to exist between the generative and intestinal canals. The following table, extracted from a paper already referred to,* embodies the results I have obtained.

State of the Bowels during Healthy Menstruation.

Author's second list:—

	Number of Observations.
Relaxed before the time	22
" at the time	44
" before and after	11
" after	1
	78
Confined before the time	4
" at the time	23
" after	1
	28
Unaltered: regular as usual	37
" confined as usual	2
" relaxed as usual	3
	42
	148

Author's first list:—

Relaxed before the time	45
" at the time	31
" before and after	10
" after	2
	88
Bowels confined	73
	161

Dr. Butler Lane's list:—

Bowels relaxed	33
" confined	45
State of bowels unaltered	22
	100

* On Catamenial Diarrhoea, by E. J. Tilt, *London Journal of Medicine* August, 1851.

"On adding together the author's two lists, and that of Dr. Butler Lane, four hundred and nine observations are obtained, out of which it would at first appear that some kind of intestinal disturbance during menstruation was only absent in sixty-four cases; but I consider this proportion to be smaller than what is really the case, from the fact of my not having been sufficiently explicit in my inquiries of the seventy-three women reported as having their bowels confined in my first list. If I had asked them whether the bowels were in their usual state or more confined than usual, I should probably have obtained results similar to those I subsequently found, and then it would appear that some kind of intestinal derangement may be expected during menstruation in about seventy-five per cent. of cases. Diarrhoea occurred at some time or other in one hundred and ninety-nine instances out of the four hundred and nine cases, so that this symptom may be expected in about fifty per cent. of cases. The frequency of constipation, for reasons already given, cannot be inferred from the author's first list, nor from Dr. Butler Lane's, which are not sufficiently explicit, and further inquiry is necessary before I can venture to assert that it is faithfully represented by my second list."

This shows most forcibly how much it is necessary for us to *know* before we are in a position to *inquire*; and I am the first to confess, that although obliged to attach some value to researches which, to my knowledge, have never before been conducted on so extensive a scale, the principal value I ascribe to them is their having prepared me for continuing the same inquiry more fruitfully hereafter.

Returning to my subject, I shall remind the reader that I have shown that the two contiguous mucous surfaces of the uterine and the intestinal canals react on each other, in the normal state, in such a manner that the process of menstruation deranges the intestinal secretions; while, on the other hand, it is notorious that diarrhoea deranges the menstrual discharge, bringing it on when it should not appear, and prolonging it beyond its proper time. These contiguous surfaces are relieved by the same vessels, and are animated by nerves either derived from the same ganglionic nervous plexuses, or from the same portion of the spinal cord; and when the uterine discharge is arrested, the nervous energy and the blood which used thereby to find vent of a necessity to the intestinal surface, for the veins of the uterus communicate immediately with the portal system. This cannot occur without determining various derangements, carelessly expressed under the terms biliousness, indigestion, flatulency, acidity, diarrhoea, and costiveness.

Dr. Butler Lane's observations on the coincidence of the derangement of the biliary secretions at the change of life coincide with my own experience.

Nothing can be more common than to find severe biliary derangement occurring at or about the period of menstrual secession; and, looking at the great physiological change which then takes place in connection with hepatic development, it is naturally to be expected. A woman will complain of being bilious—viz., there may be a bitter, oily taste in the mouth, a sensation of burn-

ing in the throat, frontal headache, nausea, and even vomiting, the urine high coloured, the bile abounding in the alvine dejections, and perhaps causing heat and a stinging sensation in the rectum, the tongue furred, a biliary tinge pervading the cutaneous surface, &c., &c. Such symptoms, or a modification thereof, often mark the great and important vicissitude which takes place in the female economy at the influential epoch in question, and the due appreciation of the symptoms made manifest, their ascription to the real source, and their judicious treatment, medicinal and dietetic, are of the highest consequence to the future welfare of the patient. I suspect that a great majority of those distressing maladies to which the uterus and its appendages become liable in life, might be traced in their origin to neglect and maltreatment at the critical period."

Such a state, in which a cursory dose of calomel, or a pill and draught, are often beneficial, shows the utility to be derived from the systematic use of purgatives at the period of cessation; but this is no reason for throwing aside other remedies, and neglecting the observance of the wholesome sanitary measures I have carefully inculcated.

How then must purgatives be administered?

At that truly critical period of the lifetime of woman, comprised between that when the menstrual function begins to be normally irregular and the epoch of its cessation—a period which women appropriately call the "dodging time"—purgatives are useful, no doubt; but we must remember that the menstrual function sometimes ceases by a gradual diminution of the quantity of the secretion and the time it occupies; sometimes by a series of irregularities in the quantity, quality, and epochs of its appearance; sometimes by a terminal flooding. Although nature occasionally chooses this last termination, we have no right to risk the possible dangers of its induction by the exhibition of purgatives which are energetic in their action. It seems to me injudicious to give purgatives just before the menstrual epoch, for they might increase the flow which nature seeks to diminish; on the contrary, it is more prudent to prescribe the frequent use of the milder opening medicines, which may diminish by degrees the plethora of the abdominal viscera.

In some women, after cessation, the stock of vital productivity is fairly exhausted, and purgatives are not absolutely required; but in most there is a superabundant nervous energy, and a superabundance of blood, for that supply which was formerly sufficient for the maintenance of both mother and offspring, can thenceforth only be expended on the woman's frame, in which the circulating system tends to assimilate to that of man.

This superabundance of blood and nervous energy may, after cessation, be frequently kept under by the frequent use of purgatives given habitually in small doses, for the intention is not to bring on a return of the menstrual discharge, but to diminish abdominal plethora, and the necessity for that plethora, seeking for a less manageable safety-valve; and as it may be some months before the constitution has settled down,

it would be advisable to consult the patient as to what medicine she has best tolerated.

With respect to the purgative to be prescribed, much depends upon the patient's constitution, for as a long-continued action will be required, it is better to make use of some mild purgative which has been found to agree with the patient.

I frequently prescribe the soap-and-aloes pill of the Edinburgh Pharmacopœia, ordering five or ten grains to be taken with the first mouthful of food at dinner. Hæmorrhoidal affections I have never seen *caused* by this frequent use of aloes, but I have seen them *relieved* by it; and as I read in Giacomini's "Treatise of Materia Medica" my experience on this point is confirmed by that of Avicenne, Stahl, Cullen, and his own, so I think there must be some exaggeration as to the extraordinary property generally ascribed to this valuable drug, which can be associated with hyoscyamus, and is thus said to be less liable to induce piles. Kemp and Hufeland recommend the following powder to be given to those who are advanced in years, and who complain of a tendency to vertigo:—Guaiacum resin, cream of tartar, of each half a drachm, to be taken at night. This, no doubt, will sometimes be found a useful laxative; so will the popular remedy called the Chelsea Pensioner, of which Dr. Paris has given the following formula in his excellent Pharmacologia:—Of guaiacum resin, one drachm; of powdered rhubarb, two drachms; of cream of tartar and of flowers of sulphur, an ounce of each; one nutmeg finely powdered, and the whole made into an electuary with one pound of clarified honey: a large spoonful to be taken at night. I generally administer the flower of sulphur alone, or else to each ounce of it I add a drachm of sesquicarbonate or bichlorate of soda, and sometimes from five to ten grains of ipecacuanha powder. One to two scruples of these powders, taken at night in a little milk, is generally sufficient to act mildly on the bowels, and I consider such combinations as very valuable when a continued action is required.

I feel obliged to class sulphur amongst purgative remedies because such is its visible action, but I believe that it owes its chief value, in diseases of cessation, to another action, much more difficult to understand, and which has long rendered it so valuable both in hæmorrhoidal affections, where there is an undue activity of the intestinal capillaries, and in skin diseases marked by a morbid activity of the cutaneous capillaries. Whether sulphur cures by acting on the nerves or on the blood-vessels, or by modifying the composition of the blood itself, is difficult to tell, but it does certainly cure the diseases I have enumerated. It forms part of many popular remedies for the infirmities of old age, was recommended by Hufeland, and is lauded by Dr. Day in his work "On the Diseases of Old Age;" but its utility is not generally known in all derangements of the menstrual function, at whatever period of life they may occur, and particularly at the change of life, where, if required, its action may be continued with impunity for months and years.

LOCAL TREATMENT.

Nothing can be more erroneous than to consider a leucorrhœal discharge occurring after the cessation of menstruation as indicating a serious disorder of the womb, requiring local examination and caustic applications; for, as I have shown, inflammatory diseases of the womb generally lose their intensity and become less frequent when the generative apparatus is affected with a species of atrophy. A discharge occurring at that time is rather to be considered as a preventive of more serious disturbance. It will be remembered that I found the frequency of leucorrhœa to be as follows:—

Leucorrhœa existed in ...	58 per cent.
" was augmented in ...	44 "
" was stationary in ...	8 "
" was diminished in ...	6 "

The rule I adopt in such cases is not to check but to regulate this vicarious discharge by increasing the solubility of the bowels and the habitual moisture of the skin. Frequent lotions with tepid water may be recommended, but I very rarely order injections of tepid or cold water, and even when these are necessary, seldom with the addition of any astringent substance.

If, however, the discharge be very abundant, smells offensively, and has an acrid action on the skin, if it be accompanied by a great amount of lumbar and sacral pains, it is most probably secreted from an ulcerated surface of the womb, and it would be the height of absurdity not to ascertain, by a proper examination, what is the real nature of the case. If it be a cancerous affection, it is better to know the worst, but, as in the case of Frances Webb, given in a former paper, it may be only one of those inflammatory affections of the womb, which, however much they resemble cancer in some of their outward appearances, nevertheless admit of rapid and radical cure by those surgical applications which my venerable teacher, Professor Recamier, of Paris, first introduced into practice some forty years ago.

Such cases are of rare occurrence, but when they do happen they require local as well as general treatment; and if I had not already protracted this work to a greater length than I at first intended, it would be easy to prove this position by cases from my own practice.

I have passed in review the principal remedial measures by which diseases incidental to the change of life can best be cured. There are others, valuable perhaps, but which have now lost the importance attached to them when the medical mind was instinct with other theories than those now in vogue.

Thus, Gardanne, in 1816, was of opinion that "no remedies are more useful in diseases of cessation than blisters, issues, and setons." Now, I must own that on account of the subjection these remedies entail, and the real infirmities they create, I participate in the prejudice entertained against them by women, and for this very reason I should be sorry if my not adopting them should in any way diminish the good opinion others may entertain of their efficacy. What has been said in praise of alkaline preparations, of baths, of exercise, and of the advantage of a studious cultivation

of the pleasures of nature, rather than those of society, by women at the change of life, will clearly point out how the combination of all these agencies, as they are to be met with in so many agreeable watering-places, both at home and abroad, may be made serviceable for the cure and prevention of disease. For those blessed with ample fortunes, the safely getting over a critical period of life, and the remodelling of a constitution so that it may endure for many years, might be made a mere pastime if proper directions had been given by those who have written on mineral waters, respecting the nature of the springs to be recommended and the manner of taking them; but unfortunately this has not been done. The medical attendant at each medicated spring becomes imbued with so strong a feeling of idolatry for his own Egeria, that we cannot help smiling at the tales of wonder he recounts; but few of these wondrous tales relate to the utility to be derived from these mineral waters by women at the change of life; and I have even sought in vain in Mr. Edwin Lee's valuable continental medical guide, for the precise information on that matter which patients so much require. During a long residence in France, Germany, and Italy, I paid great attention to the subject; but the law of the just proportions between the component parts of a work, however small, an appreciation of which has already prevented my entering so fully as I am prepared to do into the study of pseudo-narcotism, and of other interesting phenomena of menstruation, now again forbids my writing a long chapter on mineral waters. I shall, therefore, merely enounce the following general propositions:—

1. That whatever mineral water is given, it should be in the mildest form, otherwise much mischief may be done, by causing fever to come on at night, or by inducing a state of nervous excitement.

2. That according to the different cases do patients derive most benefit from the alkaline waters, from those containing carbonic acid gas, or from the sulphureous springs, but not from the ferruginous waters.

3. That the baths should only be taken of a temperature imparting a grateful sensation, and, notwithstanding the rules of the establishment, they should not be continued for more than half an hour at a time.

4. That, generally speaking, patients will derive more benefit from bathing in sulphureous waters three or four times a week, than from taking them internally.

5. That, on the contrary, patients will in general derive more benefit from drinking those alkaline or effervescing waters, which induce a slight solubility of the bowels, than from bathing in them.

6. That, as it is often recommended to bathe in the sulphureous, while an alkaline or effervescent water is to be taken at meals or during the day, it is not without advantage to resort to those watering-places which combine a variety of springs.

8, York Street, Portman Square.

Hospital Reports.

DENBIGHSHIRE INFIRMARY.

CASES ADMITTED UNDER THE CARE OF RICHARD LLOYD WILLIAMS, M.D., F.R.C.S., CONSULTING-SURGEON TO THE DENBIGHSHIRE INFIRMARY.

Read before the Meeting of the North-Wales Branch, June 7th, 1851.

Case of Encysted Tumour of the Eyeball.

THE following is the history of the case previous to the patient coming under my notice, in the words of a highly-respectable surgeon at Machynlleth:—

"13th Sept., 1850.

"Sir,—I am desired by Miss ———, on behalf of a young woman who is anxious to be admitted to the Denbigh Infirmary, and placed under your care, to give you a short history of her case:—

"Mary Williams, aged 18, a dressmaker, has been suffering for a long period from a protrusion of the right eyeball. The disorder commenced ten years ago, and gradually increased, without much suffering, during the first six years, and then became stationary, presenting the appearance now seen. Vision has been good till the last two years, since which time it has become much impaired. The protrusion (according to her account) is at times perceptibly smaller. She has suffered much pain during the last four years, and especially during the past week, when it became excessive, shooting from the eye to the forehead and temple. Her general health has been good, and bowels regular. Catamenia appeared for the first time three weeks ago. She has been under the influence of mercury and iodine, and had a seton in the nape of the neck for six months, without any perceptible benefit. The slowness of its growth, and its arrest for so many years, combined with the good state of the patient's general health, would indicate that the affection is not of a malignant character, and that it is a favourable case for extirpation, if deemed necessary.

"I remain, Sir, yours obediently,

"HUGH LLOYD."

On the 7th of October Mary Williams was admitted as an in-patient of the Denbighshire Infirmary. The eyeball protruded extensively, and her sufferings were very great, both on the orbit as well as through the head to the occiput. Her general health was very little impaired. After giving the patient a few days to recover the effects of her journey, and administering to her some house apertient medicine, I had a consultation with my colleagues, and it was agreed that an operation should be attempted, for the relief of this formidable disease. I determined to make an incision through the upper eyelid, so as to expose the tumour, and to be guided by appearances. If I found the eyeball involved in the disease, I proposed to remove the whole mass. Chloroform was judiciously administered to the patient by my friend Mr. Turner. Upon making an incision along the whole of the eyelid covering the tumour, and making a careful examination of the parts,