

The Climacteric Disease in Women; a Paroxysmal Affection occurring at the Decline of the Catamenia.—By W. TRENKLE SMITH, M.D., Lond., Lecturer on Midwifery and the Diseases of Women in the Hunterian School of Medicine.—The climacteric disease has received much attention, since the appearance of the valuable essay on the subject by Sir Henry Hallford, in the fourth volume of the Transactions of the College of Physicians. The climacteric disorder there described, consists of a sudden decline of the vital or biotic powers in advanced life, and is chiefly met with, in the male sex, from the age of 65, and upwards, the female being comparatively exempt from its attacks.

Periodicity is, however, more indelibly marked upon the female than upon the male constitution; and periodic tendencies are as distinctly seen in the diseases, as in the functions, of the female economy. With reference to the sex, the most important climacteric or periodic epoch, is that of the decline of the catamenia. This epoch is generally a time of anxiety, both to patients and professional men; and much care has been bestowed on the study of the access and exacerbations of organic diseases, especially of the uterine system, at this time. Still, it appears to me, *the special disorder* of this period, from which a variety of secondary disorders arise, has never been noticed with sufficient accuracy, either for the purposes of diagnosis or of practice. The climacteric disease of this epoch, though of considerable importance, has not been admitted into any nosology.

When we consider the importance of ovulation to the ovaria, and of the catamenial secretion to the uterus, both which functions are carried on in healthy women with unvarying regularity, except during gestation and lactation, for the space of thirty or more years, we cannot wonder that the revolution produced in the economy by their cessation, should be attended by various disordered actions. This death of the reproductive faculty is accompanied, as it were, by struggles, which implicate every organ and every function of the body, but especially the nervous system in all its divisions,—cerebral, spinal, and ganglionic. This disturbance of the nervous system, though it has escaped methodical observation, takes a certain definite form, without the clear detection of which, its treatment must necessarily be ill-directed and unsatisfactory.

As soon as irregularity in the appearance of the catamenia is observed, certain nervous symptoms, more or less intense, are almost always present. The most common and marked of these are "heats and chills" of the surface of the body; but these heats and chills are not merely disordered sensations,—they are in reality part of a paroxysmal disorder, which a close observation readily makes out. During the whole period of the catamenial decline, whether the process of the arrest of the generative function be spread over a few months, or two or three years, a state of general hyperæsthesia is present. But the paroxysmal disorder I have referred to, is quite distinct from the general hyperæsthetic condition. In the present day, owing to the excessive stimulus of education, the rapid transaction of business, and numerous forms of social excitement, unknown to former times, hyperæsthesia has reached a pitch which has never been hitherto observed. We might, indeed, consider hyperæsthesia as a disease almost as distinct as paralysis of motion and sensation, or spasm. At the catamenial decline, hyperæsthesia is often most distressing.

The simplest form of the paroxysmal attack to which I wish to direct attention, consists of a sudden sensation of cold over the entire surface of the body, which is in a few moments followed by a sense of heat of skin, of an intense character, with the sensation or choking of pharyngismus. These are in turn followed by a cold perspiration, which renders the skin cold and clammy, and sometimes also by a free secretion of urine. At the commence-

ment of the attack, the face is pale, and there is slight headache; but when the heat of surface begins, there are flashings before the eyes, ringings in the ears, and frequently nausea, or even vomiting; the face is flushed, there is considerable distension of the veins of the neck and face, and throbbing of the carotids and cerebral arteries. There are, in fact, in many cases, all the symptoms of the *petit mal* in epilepsy. Or the seizures may be compared to a brief ague fit, of which the cold, hot, and sweating stages follow in quick succession. As the condition of the ovaria and the uterus is the cause of this disorder of the nervous system, we might almost be tempted to call it an ovarian or uterine intermittent. The paroxysms are very irregular, and obey no particular times; but they are more frequent at the dates when the catamenia are flowing, either in the scanty or profuse manner so common to the decline of menstruation, or when an ovarian period is passing over, as it frequently does, without any uterine secretion. The brief attack is brought on by taking food or drink, especially stimulating drinks, or by any sudden mental emotion or surprise. The most trivial event, a sudden noise, speaking to a stranger, or waking from sleep, induces an attack. The seizure leaves the patient after a minute or two, bathed in cold perspiration. It is followed also by a sense of great feebleness and languor, much irritability of temper, and some confusion of ideas and memory. Nervous symptoms, during the decline of the catamenia, have often been referred to by writers on the diseases of women, and every practical man must have noticed the heats and chills of this period; but until I did so, no one had pointed out that these are not vague symptoms, but a succession of definite and peculiar paroxysms.

In the severer paroxysms, all the symptoms I have described are present; and at the height of the attack, there is a brief insensibility or delirium, the paroxysm lasting, altogether, several minutes. The patient sometimes falls down, as if in a slight epileptic or apoplectic seizure. In some of the worst cases I have seen, the attacks have occurred with the greatest violence during sleep, the patient waking in affright at the commencement of the paroxysm. Violent tremors follow, in severe cases, the perspiration in which the attack usually terminates.

As regards the essential nature of these climacteric paroxysms, in my work on Parturition and Obstetrics, in which I first referred to this affection, I have dwelt at some length on the reciprocal physiological actions which are constantly going on between the ovaria, the mammae, and the uterus; actions which produce in regular series the successive ovulations occupying the time between puberty and the catamenial decline. When the cessation of the catamenia arrives, the mammae and the uterus are no longer stimulated by the ovaria to their wonted actions, but the ovaria are not at once reduced to post-menstrual inactivity; before they subside, they produce the uterine disturbance, and the erethism of the nervous system, in which the paroxysmal disorder I have been describing has its rise. Besides the strictly ovarian stimulus to the nervous system, the vascular plethora, resulting from the non-secretion of the catamenia, no doubt increases the nervous excitability; and to this we must probably add the toxic effect of retention of the menstrual fluid, as suggested by Dr. Cormack, in his observations on convulsions arising from suppression.

Another very important point, perhaps the most important point, in the pathology of this affection, is the condition of the uterus. At the change of life, this organ is liable to greater congestion than at any other time. This is well known to be the date of the origin of many of the most dangerous and fatal of the structural diseases of the uterus. When there is not irregular incoorrhagia, there is constantly recurring uterine congestion, caused by the irregular and inefficient ovarian stimulus. In all cases, in which the paroxysmal disorder is severe, the uterus is found upon examination to be turgid and swollen. In fact, if we refer the general conditions, and the paroxysmal disorder, to any one cause, it must be to the uterine congestion, caused by the special arrest of the ordinary uterine functions, and the irregular ovarian stimulus, which continues, but ineffectually, to goad the uterus to action. This view of the pathology of the affection leads to the most rational and successful method of treatment. It is curious that some other irritations of the pelvic region will produce paroxysmal attacks similar to the ague. This has been frequently noticed in cases of irritation and suppuration in the perineal region.

Symptoms resembling in many respects those of the climacteric paroxysm, sometimes occur in nervous patients suffering from sup-

pression of the catamenia, or from suppression alternating with menorrhagia, and particularly in those cases of irregularity of the catamenial function which occur in widows or in married women living separate from their husbands. But the genuine attack seldom occurs except at the decline of menstruation. Whenever widowhood or separation takes place at the change of life, all the distressing symptoms, and the ovario-uterine excitement, are considerably aggravated.

The proper recognition of this paroxysmal affection of the climacteric is of great importance in practice. The paroxysm itself forms the basis of many of the severe affections of the nervous system; while the states of the uterus and ovaria, which produce it, give rise in turn to many of the organic diseases which follow the cessation of menstruation. The climacteric paroxysm is the first distinct step in the nervous pathology of this important period. This affection is intimately connected with hysteria, epilepsy, paralysis, apoplexy, and even mania, and may terminate in any one of these maladies; it is only by a due recognition and judicious treatment of the preliminary disorder, that these grave complications can be successfully met or prevented.

I proceed to refer briefly to the most prominent complications arising out of the climacteric disease.

CLIMACTERIC HYSTERIA.—I have seen the paroxysm pass into a violent hysterical attack, all the visceral spasmodic actions which mark the hysterical fit being present,—such, for instance, as painful and spasmodic action of the cardia, or cardiasmus; painful contractions of the pharynx, or pharyngismus; tenesmus of the rectum and bladder, &c. In hysterical subjects, the disorder is always aggravated by the decline of menstruation; though, after that period has passed, the hysterical tendency diminishes. The climacteric paroxysm may produce, besides the hysterical fit, a variety of anomalous hysterical symptoms, such as fainting, insensibility, violent weeping, &c.

CLIMACTERIC EPILEPSY.—I have also known the paroxysms of the climacteric disease become more and more severe, the insensibility more prolonged, and attended by convulsions, until, in fact, genuine epilepsy has been produced. I have seen several cases of epilepsy in which the disease appeared for the first time during the decline of the catamenia, and grew out of the peculiar paroxysmal disorder I have attempted to describe. The climacteric paroxysm itself disappears when the constitution is established after the completion of the catamenial change; but unfortunately, when epilepsy becomes grafted upon it, the more serious disease remains after the change of life has passed.

CLIMACTERIC APOPLEXY.—I have known cases in which, during the severe climacteric paroxysm, the patients have had an attack of hemiplegia or apoplexy. Cases of sudden death, or paralysis occurring at the change of life, are, I have little doubt, to be attributed to these paroxysms. The paroxysm itself produced the cerebral distension, and the danger of this is increased by the greater fulness of the circulation which generally exist at this epoch. In some constitutions, a very slight paroxysmal seizure may produce disastrous results.

CLIMACTERIC MANIA.—Insanity frequently occurs at the change of constitution. I have no doubt that it is often owing to the climacteric paroxysms. Each paroxysm is a distinct shock to the brain, leaving behind it peevishness, irritability of temper, and eccentricity. While writing these pages, I was consulted by a lady, aged 45, who has suffered for two or three years from what women invariably term heats and chills. Her disposition towards her husband and family has completely altered. She is morose and passionate on the slightest provocation, yet having a full sense of her improper explosions of temper, which at times she deprecates most earnestly. Her nervousness is very great; she cannot listen to the same noises, or occupy herself with the same needle-work long together, without a frantic feeling of delirium and loss of self control. In this case the paroxysmal disorder is the evident cause of her mental distress. When the attack is severe, there is, as I have said, transient delirium at each visitation. When the attacks are frequent, great cerebral irritability is induced, and the patient may become maniacal. In considering the relations of epilepsy, paralysis, apoplexy, and mania, to the climacteric disorder, we must not judge of the results by the shortness of the climacteric seizure. We know that in other states of the constitution, a momentary paroxysm of no great severity may produce the most serious cerebral disease.

In a note to his chapter, on the "Disorders attendant on the

Decline of Menstruation," Dr. Ashwell refers to the insanity of this period, and his observations are so interesting with reference to this subject, that I quote them entire. He says:—"I have lately attended several cases of decided insanity, consequent on the use of wine and spirits during the period of the catamenial decline. In one, which I saw in consultation with Dr. Holland, when these stimulants had been employed with the hope that they would relieve the languor and depression, the affection assumed all the characters of violent mania, eventually, however, subsiding into what was feared would be incurable madness. Nevertheless, the patient entirely recovered in two years: the efficient remedy being frequent leechings of the cervix uteri, moderate purgatives, nutritious diet with malt liquors and light wines, and extreme tranquillity in the country. In two other but less severe examples, similar means have ended in a cure. I cannot forbear to mention how superior have been, in these cases, the beneficial and almost unvarying immediate good effects of uterine bleeding, over every other kind of depletion."

Now I have no doubt whatever, and I believe Dr. Ashwell will join with me in the opinion, that such cases are examples of the affection I have been describing, aggravated by the improper use of stimulating drinks. I have observed, that in the intervals of the slight attacks, there is great mental depression and a craving for mental and physical stimulus, indulgence in which of course only aggravates the malady. Cases of mania having this origin ought to be placed in a different category from insanity from ordinary causes, as the subjects of it, under judicious treatment, generally recover; and I have no doubt that many such cases might be prevented from proceeding to more serious disease, by the detection and treatment of the climacteric paroxysm, as the first link in the pathological chain.

The treatment of the climacteric disorder should have reference chiefly to—

- I. THE CEREBRAL SYMPTOMS.
- II. THE OVARIO-UTERINE DISORDER.
- III. THE GENERAL HYPERÆSTHESIA.

I. THE CEREBRAL SYMPTOMS.—Our first care should be to prevent the paroxysms as far as possible. The peculiar cerebral attack being brought on or exaggerated, in the special condition of the nervous system at this time, by any local irritation, great attention should be bestowed upon the stomach, bowels, and uterus respectively. In its exaggeration by local causes of irritation, the disorder very closely resembles epilepsy. The diet should be regulated, the bowels kept free from irritation and constipation, and the uterus should be treated after the manner to be referred to, when I come to the special management of this important organ.

All violent mental emotion should be carefully avoided. Great watchfulness should be observed on this point, as in consequence of the condition of the ovario and the uterus, and the nervous synergies excited by these organs, the mind is excessively prone to irritability. Sources of mental irritation should be prevented as much as possible. Stimulating diet and stimulating drinks should be used only with the utmost caution. At this period, women should be treated with great consideration by those in intimate relation with them. There is no time, not even during pregnancy, when greater mildness and forbearance towards them is necessary. The sexual stimulus should be used with moderation, as either excessive intercourse, or ungratified desires, are equally provocative of the general excitability and the cerebral paroxysms. Many women, during the change of life,—even those of the most irreproachable morals and conduct,—are subject to attacks of ovario uterine excitement approaching to nymphomania. This is a consideration of the gravest importance; for, without doubt, some of the errors committed by women at this time, are more the result of bodily disease than of moral failing; and, as such, might be prevented by judicious treatment. Every care should be taken to control the mental emotions, and to soothe the physical causes of their excitement. It should ever be borne in mind, that, at this epoch, all the emotions connected with sex are undergoing a great revolution, and that before their subsidence into the calm of post-menstrual life, sudden ebullitions are very prone to occur.

If the cerebral disorder be treated as an independent affection, it will often seem, from its violence, to require active depletory

treatment. This would be a mistake, and would be likely to produce great mischief. Patients may be rendered anæmic, without curing the disorder; in fact, it will often increase in severity under active depletion. Still, it becomes necessary in some cases, where the headache is severe, or when the delirium or insensibility are very marked, to apply leeches to the temples, or to employ cupping to the nape of the neck, from time to time. Otherwise the cerebral congestion, inseparable from the paroxysmal attacks, may produce serious lesions of the nervous centres. The state of the brain should be especially watched during the late catamenial dates, or at those irregular times when there are indications of a catamenial crisis, such as pain in the back, thighs, and hypogastrium, but without the flow of any uterine secretion. It is at these times that the sudden cerebral mischief is most likely to happen.

I do not enter into the treatment of the epileptic, hysteric, paralytic, and apoplectic seizures, which arise out of the climacteric paroxysm, my present purpose being chiefly to point out the prevention of these serious affections.

Regulation of sleep is of considerable consequence. Early hours and early rising should be recommended. Heavy and prolonged sleep, particularly in the morning, exerts a marked influence in increasing the severity and frequency of the paroxysms. The indisposition to exertion should be conquered as far as possible. At no time of the female constitution is exercise so important as at this. Patients should be as much as possible in the open air. Indeed, in the erethism of the climacteric, the open air is almost as important as in the *erethismus mercurialis*.

II. THE OVARIO-UTERINE DISORDER.—The treatment of the ovario and uterus is the most important point in the management of the female climacteric. The cerebral symptoms are only the results, while the conditions of the sexual organs are the causes of the more remote maladies. Any disorder of the uterus or ovario, beyond that actually incident to the catamenial change, should be carefully treated. Irritation or abrasion of the os uteri, or displacement of the womb, or congestive enlargement of the organ, increases the severity of the constitutional symptoms.—The most natural and effective remedy for all the uterine disturbances of this period, is moderate depletion from the *labia uteri*. The blood may be drawn by incisions into the os uteri, just as in scarification of the gums. I have often used a gum-lanceot with great good effect. Or if the depletion be required to be more considerable, three or four leeches should be applied, by the aid of the speculum, to the os uteri. Leeches draw blood more suddenly from the vascular os uteri than from any other part of the body to which they are commonly applied, and often produce prompt and immense relief,—all the relief, in fact, of the catamenial secretion, without any of its inconveniences. The suddenness with which leeches applied to this part fill themselves, considerably increases the good effects of their application, and for some hours after their removal there is an oozing of blood from the leech-bites. Even in cases where hæmorrhagic symptoms accompany the change of life, the application of leeches before the coming on of each uterine flow diminishes the menorrhagia, by diminishing the uterine congestion. Occasional local depletion, besides its importance to the climacteric disorder, lends more than anything else which can be devised, to prevent the structural diseases which frequently set in or exacerbate at this epoch. The effects of uterine depletion in mitigating the most distressing head-symptoms, is often almost marvellous. This form of depletion ought to be resorted to from time to time, during the change of life, according to the extent of the uterine congestion, in all women who suffer materially from this alteration of constitution. We often see indications of the treatment which is required in sanguineous effusion from vaginal or rectal varices, or from hæmorrhoidal tumours, or even from the stomach and lungs. It is of course still better if the depletion be made from the uterus itself. The effect of uterine depletion is not confined to the uterus, but extends to the other parts of the sexual system, the Fallopian tubes, the ovaria, and even the mammae. Occasional uterine depletion appears to me of the first consequence, not only as a method of cure, but as a means of preventing organic disease of the uterine organs, and of those organs affected by the uterine synergies. Many of these disorders, occurring at the change of life, appear to be aberrations of the formative power which, during the whole reproductive era, has expended itself upon ovulation, gestation,

and lactation; but which, being now turned from these physiological processes, takes a pathological direction, and runs into disease. Thus, then, local depletion is of still more importance as a palliative and preventive of uterine and other diseases of this period, than as a means of removing more remote symptoms. In treating diseases of the reproductive organs, the special reproductive power inherent in these organs, and manifested even in their diseases, should never be lost sight of.

The local application of cold is an important auxiliary to depletion, at the female climacteric. Cold hip-baths, or ducho baths to the loins, cold water injections into the rectum, the injection of cold water, or iced water, or the introduction of small pieces of ice, into the vagina, are the modes in which cold can best be applied. Injections of any other kind than of simple or iced water, generally produce irritation at this period; and sometimes the vagina is so irritable, that even cold water will not be borne. In cases where occasional returns of the catamenia assume a hæmorrhagic or dysmenorrhagic form, warm and anodyne injections, both into the rectum and vagina, are useful, acting as internal fomentations. Warm water and laudanum, or the infusion of poppy-heads with laudanum added, allay uterine pain and excitement. When menorrhagia with relaxation is the prevailing symptom, strong alum baths,* in the intervals between the menstrual discharges, tend to repress the profuse uterine secretion, and to remove the relaxation of the uterine and vaginal tissues.

Care must be taken to avoid rectal irritation, as any excitement of the lower bowel is sure to be participated in by the uterus. The bowels should be kept in a lax state by cooling aperients, or enemata; but drastics, and particularly aloes, should be avoided. The habitual use of aloes, either as a purgative or dinner pill, has seemed to me to increase the uterine disturbance of the change of life, when this period arrives. The management of the bowels at this time is often a difficult matter, as the lower bowel participates in the uterine habit, and is at one time irritable and at another confined. To give aloes as an aperient at this period is mischievous; it is still worse to give it as an emmenagogue. All emmenagogue remedies are as distinctly contra-indicated at this epoch as during pregnancy. They are certain to produce mischief. But although the uterine secretion is not to be stimulated, the other important secretions,—hepatic, renal, alvine, and cutaneous,—ought all to be carefully regulated and kept in full play, to compensate for the important secretion which is about to become extinguished.

III. THE GENERAL HYPERÆSTHESIA.—The hyperæsthesia and the peculiar æsthetic paroxysms, to the study of which it has been my main object to draw attention, without doubt depend upon the erethism or excitability of the nervous system, induced by the irritable condition of the uterine organs, and upon the partial suppression of the catamenial secretion. All the treatment which has been mentioned contributes to the relief of the hyperæsthetic symptoms. I would, however, insist on the importance of regulating the diet of patients undergoing the catamenial change. From the tendency to plethora and *embonpoint* at this period, a tight, nutritious, but not full, diet, with little wine, and no malt liquors, should be prescribed. Owing to the distressing sensations common to this time, small quantities of spirits are sometimes ordered, and are always gladly taken by patients. There is often a diseased craving for stimulants at this time, which, in several instances, I have seen pass into a decided habit of spirit drinking. Spirits ought only to be allowed, with the greatest caution at this time of the constitution, as their good effect is only temporary, while their permanent influence is most mischievous. I know of nothing equal to moderate doses of sulphuric ether and valerian, for the relief of the depressing hyperæsthesia, and also of the paroxysms, when these are slight. They often act like a charm in soothing the sensations of the surface of the body; and, given as a medicine, they beget no such habit as the permission to take small quantities of spirits frequently does. In the climacteric state of the female constitution, sulphuric ether is a more decided sedative than either morphia, the preparations of opium, or even hyoscyamus. In the height of the hyperæsthesia, an ether-

draught will often procure sleep when the brain refuses to be soothed by narcotics. Throughout the whole period of the change, great attention should be paid to the skin. The clothing should be carefully attended to, and, during winter, flannel jackets and drawers should be worn. Tepid bathing, with subsequent friction, are of great use in diminishing the excessive sensibility of the skin.

The time during which women are subject to the climacteric paroxysm, and the other affections at the decline of the catamenia, varies in different habits. Some women pass through it in a few months; in others, it extends over three, four, or five years, rendering the patient miserable during the whole time. The great majority of women suffer more or less until the cessation be finally accomplished; but there are a few to whom this time of life is a great blessing, giving them greater strength and comfort than they had ever enjoyed during the childbearing epoch. But these cases are the exceptions.

I have thus attempted briefly to sketch the special paroxysmal affection of the female climacteric, and its relation to other disordered conditions incident to the change of life. I am well aware how imperfectly this has been done. Indeed, within the limits of a paper, it would be impossible to do it justice, as the subject is one of sufficient importance to exhaust a treatise. I trust, however, I shall have the satisfaction of directing other observers to a very curious malady, and one which certainly, when I first drew attention to it, had not been distinctly recognized or described.—*London Journal of Medicine.*

* I use the formula recommended by Dr. Ashwell—viz., ℥ xvi of alum to each gallon of water; the temperature to be at 98 deg.