SOME NEUROSES OF THE MENOPAUSE.

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PUBERTY and the menopause, end-links in the chain of sexual life, are universally recognized as periods of peculiar nervous instability. The menopause especially, which marks the beginning of the second sexual childhood, occupies a prominent place on the border-line between physiology and pathology, and its completion is characterized by profound structural and functional alterations in the entire organism. Organs which have for years exerted a controlling influence over the woman's life undergo more or less complete involution. The ovaries wither, the Graaffian follicles disappear, the Fallopian tubes are almost obliterated, the uterus returns to its infantile form, the vagina becomes shorter and narrower, and the pelvic bloodvessels and nerves are reduced in size. Nor is this process limited to the reproductive system : the spleen, lymphatic glands, Pever's patches, and other organs undergo an involution somewhat similar, but less in degree. Elimination from the skin, mucous membranes, and glands is largely increased, and partially compensates for the loss of the accustomed periodical discharges.

Changes so remarkable stamp this period as one of great physiological importance, and necessitate a readjustment of the functional activities of the entire organism, which readjustment is not usually established without more or less systemic disturbance. As a rule, the brunt of these disturbances falls upon the nervous system. Especially is this true of those who enter the climacteric period with a nervous system tainted by inheritance, or broken in health by over-work, over-worry, excessive childbearing, or disease.

The menopause brings prominently into the foreground the proteau array of structural diseases and degenerative changes which

attend on the post-meridian of life, in which even ordinary diseases are prone to take on aggravated and phenomenal forms. It is not, however, within the scope of this essay to discuss these abnormal conditions, but to call attention to some of the endless forms of functional nervous disorders which receive scant mention in the textbooks, and which, far too often, render this period of woman's life a burden to herself, and one to be shunned alike by general practitioner and gynecologist.

On the threshold of our inquiry we come face to face with the important fact, that there is no one neurosis absolutely distinctive of, or peculiar to, the menopause. On the contrary, the symptoms are precisely such as are met with, at one time or another, during the entire period of sexual activity; yet, the prominence of certain symptoms and the peculiar grouping of others furnish a clinical picture so clearly outlined as to be comparatively easy of recognition.

Engelmann makes the statement :

"That the peripheral neuroses or nerve-pains are more common as constant or pathological neuroses, referable to uterine or ovarian disease; whilst the central neuroses—*psychoses*—more frequently signalize physiological waves, and result from the powerful impressions made by the great epochs in the functional life of woman—puberty, menstruation, parturition, and the menopause."

This generalization loses much of its force from the fact that, in many cases, the neurosal disturbance depends upon some latent or masked disease of the sexual organs, which is incited to activity by the added impulse of the physiological congestion of the several epochs: neither the local morbid disorders nor the normal physiological movement is, in and of itself, sufficient to produce the nervous denouement. The causative influence of the climacteric is, however, abundantly proven in the fact that, without any special change in the local disorder, the symptoms of nervous disturbance, as a rule, promptly subside after the cessation of menstruation and the adaptation of the system to its altered sexual relations. With the menopause safely passed the general health usually beeomes better than before, and a comfortable longevity is oftener attained by women than by men.

The inherited tendencies, constitutional and local disorders, peculiar environments, and a host of other conditions are largely concerned in the development of these manifestations and in the special forms assumed by them.

As a rule, a stormy menstrual life presages a menopause full of nervous explosions, and it is generally recognized that those who suffer severely at the beginning of menstruation are very likely to have a similar experience at its closing. For example : a woman who passes through an attack of chorea or insanity at puberty, is very apt to become choreic or insane at the climacteric.

It will save repetition to say here that the mere eessation of the monthly discharges does not complete the menopause. It properly covers the period from the beginning of the decline of the functional activity of the generative organs to the completion of involution, and the adaptation of the general system to the new *régime*. It may be stated as a general law, that all the neuropathics of the climacteric period undergo exacerbations or renewals at the menstrual epochs; or, if they have ccased, at intervals which mark the return of the menstrual nisus.

With these general remarks, I pass to the consideration of a few of the special neuroses of this period, limiting myself chiefly to those which have most often come under my personal observation.

The peculiar nervous instability of many climacteric women is aptly described by that word of recent coinage, neurasthenia, the symptoms of which are so variable and ill-defined as almost to defeat the attempt to marshal them into order.

The psychical condition of the typical neurasthenic at the change of life is peculiar. Excessively mobile in spirit, sunshine and shadow rapidly chase each other over her daily life. She is selfsacrificing in the performance of duty at one time, and, again, is querulous, vacillating in purpose, and capricious in temper. She is oppressed by fears of impending evils, and grows moody, when she becomes a veritable Jacques, "with a melancholy of her own, compounded of many simples, extracted from many objects." She is tortured by bodily pains equally hard to bear. There is scarcely an arrow in the armory of pain which may not be unsheathed at this period. These pains may be scated in any part of the body, but are especially severe and obstinate in the head, under the breast, in the back, and over the ovary.

Tic, migraine, and allied neuralgias are apt to take on unwonted severity, but the head-pain most complained of by elimacteries is a peculiarly distressing feeling of heat and pressure at the vertex or oeciput. The heat, when due to vaso-motor ehanges, is perceptible to others, and the accompanying hyperesthesia of the scalp and muscles of the nape of the neek may be so extreme as to render painful the gentlest touch. With the head-pains, there are commonly associated more or less vertigo and dulness or drowsiness. This is always an annoying sensation, and, at times, is so severe as to eause unsteadiness of gait and give rise to eruel suspicions of intemperance.

The breast-pain is so commonly associated with utero-ovarian irritation, both morbid and physiological, that the belief in an intimate relationship between disorders of the sexual organs and the sixth and seventh intercostal nerves, is forced upon us with the positiveness of conviction. In the climacteric, these intercostal neuralgias reach their fullest development. The pain is usually limited to the left side, is persistent but variable, and there are often recurring gusts of terrific severity.

The association of intercostal neuralgia and herpes zoster is well known. Previous to the menopause zoster, as a rule, is painless; but during and subsequent to this period, it is almost invariably ushered in with violent neuralgia, which is succeeded and oceasionally replaced by the herpetic eruption. After the disappearance of the eruption, the neuralgia usually returns with increased severity and pertinacity.

The "irritable breast of Cooper" deserves passing mention as a climacterie neurosis. I have lately met two cases in which the symptoms appeared for the first time at the ages of forty-four and forty-eight years. Besides the excrueiating pain, the affected breast often enlarges and becomes so sensitive that the pressure of the clothing is unbearable. Not infrequently small tender nodules form in the mammary tissue, which excite the gravest fear in the mind of the patient, and may even lead a eareless surgeon into error.

The characteristic backache is almost always associated with pain and deep-seated tenderness in the region of the ovary. It is most severe in the lumbar region, but radiates in every direction, especially along the spine. The ovarian pain is a source of nearly constant and bitter complaint, and its recurrent paroxysms exhibit a fiereeness rarely seen in any other locality.

Coccygodynia, though rarer than some other neuralgias, has

proven, in my hands, to be one of the most severe and obstinate of the neurosal affections of the menopause. One case now under care is attended by various neuropathies, the most annoying of which are recurrent cramps in the calf muscles with tingling and numbness in the entire leg. The pain is burning in character, nearly constant, but like all neuralgias subject to periodical exacerbations. Careful examination by myself and consultants has failed to reveal any pelvic disease or any cause other than the disturbing influence of the menopause.

Hysteria, with its illimitable repertory of disease minicries, plays an important $r\hat{o}le$ in the nervous disorders of the menopause. Statistics, however, offer slender support to the prevalent belief that this period is especially favorable to the development of hysteria.

Briquet's table only shows 4 out of 436 cases, and Landouzy's 15 out of 351, which originated between the ages of forty and fifty. On the other hand, Scanzoni, approaching the question from the gynecological side, found that 44 out of 207 cases began in the fourth decade, and Amann records the histories of 268 cases. of which 93 originated between the ages of thirty-five and fifty-five. But these figures give a faint idea of the prevalence of hysterical manifestations during the change of life. Few, living under the ban of the neurotic diathesis, escape decided outbreaks at this period. Of the graver forms of hysteria, trance, catalepsy, and paralytic phenomena hold the first place in frequency. Convulsions belong, as a rule, rather to the developmental periods of life. The clinical history of hysterical paralysis is too well known to detain us longer than to emphasize the fact that an atypical case of paralysis occurring in a woman in the forties is always open to grave suspicion.

Visceral neuroses arc very common at the menopause, and, while they may involve any of the viscera, those of the circulation and gastro-intestinal organs are the most characteristic.

The disorders of the heart may be grouped in the order of their occurrence, as

- I. Palpitation.
- II. Disturbances of rhythm { Intermittence. Irregularity.

With these departures from the normal, there is usually associated more or less precordial distress, and upon this tripod of symptoms

20

the climacteric builds her over-present fears of organic heart-disease. These disturbances, as a rule, occur in paroxysms of variable duration and severity, but not infrequently the pain and rhythmic disturbances are nearly constant. Fothergill alludes to the recurrence of these paroxysms at night, waking the patient out of sound sleep, as a common experience of women during the "dodging" period. I recently saw, in consultation, a case in which there was abnormal slowness of the pulse—thirty-eight to forty beats per minute and skipping of every third or fourth beat. The paroxysms lasted for hours, were always coincident with the menstrual epochs, and were, without doubt, purely functional.

Pseudo-angina pectoris of a severe type is an occasional concomitant of the climacteric. The attacks come on suddenly, usually after physical exertion or mental excitement, but sometimes without apparent cause, and all the symptoms of true angina are faithfully reproduced. The writer's experience has been somewhat exceptional in that the only examples of pseudo-angina which have come under his observation have been in women at the change of life.

The neurosal affections of the vaso-motor system are pronounced. These may be general and local. The latter are more frequent, and consist of flushes, extending over the whole body, or confined to the face or extremitics; burning in the head, side, or limbs; erythematous blotches; profuse perspirations, and cold hands or feet.

Women place implieit reliance upon flushes and perspirations as being indicative of the menopause. Tilt, in his analysis of five hundred climacteric patients, records flushes in two hundred and eightyseven, sweats in eighty-nine, and perspiration in two hundred and one. Frequent flushes of the face are almost always present for a year or more after the artificial induction of the menopause by removal of the ovaries and tubes. "The hot-flashes are sometimes attended with visible flushing of the face, hands, etc., and with distressing sensations of fulness and pulsation in the head, symptoms which are probably vaso-motor in character, but sometimes they are unattended by any such phenomena and, so far as we know, are neuroses of sensation only, and analogous to the many other morbid feelings with which such patients are liable to be attacked." (Putnam.) In some instances the floodings that come so suddenly and constitute such a marked feature of the menopause, should be classed among

the vaso-motor disturbances. In this respect they are analogous to the erythematous patches, eechymoses, and bleeding from the navel, nose, month, and other mucous surfaces, which have been repeatedly observed at the physiological crisis in woman's sexual life, the neurotic nature of which cannot be doubted.

Gastro-intestinal nenroscs are rarely absent. Gastralgia and enteralgia, though less frequent than in earlier life, are by no means rare at the menopause, and are usually associated with superficial neuralgia of the abdominal walls. Gaseous distention of the stomach and intestines, belching, a pecnliar feeling of faintness and sinking at the pit of the stomach (gangliapathy of Tilt) are most characteristic of the elimacteric period. Nausea and vomiting, common neuroses in pregnancy and certain other conditions, are rarely met with at this period. The flatulence is ordinarily greatest during the catamenia or at the abortive attempts which replace it, though more or less distention persists constantly. The epigastric faintness and accompanying dizziness are common and distressing feelings which are credited with considerable diagnostic value by many authors.

Pseudocyesis or spurious pregnancy is a curious sexual neurosis, not limited to the menopause, though rarely found at any other time of life, and is always associated with morbid or physiological nteroovarian irritation. It occurs in greatest frequency in those who have been long sterile, or who have married late in life when the sexual fires bnrn fitfully. Sims never met with it in women under thirty-eight or over forty-eight. Pseudocyesis does not properly include the fears born of a stolen intercourse, or feigned pregnancy for mercantile purposes, or the delusion of childbearing so common among the climacteric insane. In typical pseudocyesis all of the symptoms of a normal pregnancy and the order of their appearance are simulated with life-like exactness. But under an anesthetic they speedily disappear; the movements of the fetus and the tumor resolve into intestinal gas and fat in the abdominal wall, forming what Baillie humorously called "a double chin in the belly," and the vaginal examination shows the uterns and its annexes to be undergoing the usual atrophy. Thus vanishes the fond delnsion that they are "as ladies who love their lords should be."

By far the most lamentable of the nervous affections incident to

the menopause is *insanity*. The great prevalence of mental disease at the time of life when the menopause usually takes place is generally admitted, but the extent to which its occurrence is influenced by the climacteric state is variously estimated by different writers.

Dr. Merson, of the West Riding Asylum, who has carefully considered this phase of the problem, says :

That the period of fifteen years, from forty to fifty-five, though it does not furnish the highest actual number of cases, gives the highest ratio to the number of persons of that age living, and is, therefore, more prone to insanity than any other period of life. How far this result may be due to causes connected with the climacteric change it is difficult to say, but the sudden diminution in the proportion of attacks after the fifty-fifth year, would seem to point to the withdrawal of some powerful predisposing or exciting influence about this time, which corresponds with the period of cessation of the menstrual function in a large number of women.

The records of the Dayton Hospital for the Insane, with which the writer was at one time officially connected, show that over twenty per cent. of the female admissions during the past thirtyfour years were between the ages of forty and fifty. When the absence of puerperal causes is taken into account, which are computed to furnish one out of every eleven insane women, the significance of this statement is apparent. Undoubtedly, there are other factors in the causation than merely the nervous instability which attends this period of life. Many women have struggled on for years weighted down by hereditary predisposition until, at this period, when physical infirmities press heaviest and the reserve forces are least, the mental health gives way under the added worries and hardships of life. The following description is drawn from an analysis of seventy cases of insanity originating at the change of life, and observed in private practice or taken from the records of the Dayton Hospital for the Insane. Hereditary predisposition was found to exist in thirty cases, or about thirty-three per cent. of the whole number. Excluding those-twelve in numberin whom no satisfactory family history could be obtained, the percentage of those hereditarily predisposed was over fifty per cent. While the records of the asylum are not complete, there is no evidence to show that the liability to insanity was greatly influenced

by the number of children the woman had borne. Comparatively, attacks appeared to be as frequent in those who were single as in those who had borne large families.

Climacteric insanity is, as a rule, gradual in its onset. In a majority of cases the mental disease became apparent during the irregularity that preceded the final cessation of the menses. In five the mental symptoms were the first indication of the menopause; in six the insanity was suddenly manifested after a terminal flooding. In a few cases the mental disease was not pronounced until from one to six months after the final appearance of menstruation. In two sisters chorea developed simultaneously with the mental disease. They both died demented, the chorea persisting to the end of life.

Classifying the cases in the customary manner we find: mania, ten eases; melancholia, forty-eight cases; melancholia with paroxysms of excitement, twelve cases. Pure mania is, therefore, of comparatively rare occurrence. Two cases of mania were found among those already alluded to in which the mental symptoms came on suddenly after a terminal flooding. In twelve cases periods of excitement were associated with the melancholia. These paroxysms were usually transient in duration and followed by the deepest melancholia. They were marked at the regular monthly periods, even after the cessation of the catamenia, but more especially on their reappearance after a short absence.

The liability to a recurrence of insanity at the menopause, in those who have experienced previous attacks, is very strong; nearly onethird of the cases had such a history. These recurrent attacks furnish a large share of those exhibiting the symptoms of mania and the recurrent periods of excitement.

Profound melancholia was the form of disease assumed in about eighty per cent. of the cases. Two classes may be recognized. The members of the first group show in the early stages of disease, perversion of the affections, distrust of friends and relatives, which soon ripens into marked delusions of persecution. They refuse to eat for fear of being poisoned, and are suspicions of every proffered kindness. They are haunted by an ever-present fear of some impending evil, which partially explains their restlessness and frightened appearance. As a direct outgrowth of these

delusions homicidal impulses are nearly always present. The members of the second group, which is the larger, consider themselves the authors of their own misfortunes, and believe their sins have barred them from God's mercy. They bewail the commission of the unpardonable sin, which is oftener a sin of omission than commission. The personal appearance of the patient vividly portrays her depressing thoughts. Her countenance is furrowed with the lines of sorrow and despair. Negligent in dress, she paces her room wringing her hands, and lamenting her unhappy lot. She is driven about by a vague sense of restlessness—a desire to go, whither she neither knows nor cares, but hopes against hope to escape from her feelings. These delusions are associated with suicidal impulses. At least sixty per cent. of the cases recorded here were suicidal, many of whom had made repeated and desperate efforts.

The prognosis of climacteric insanity is more favorable than in any form of mental disease, excepting puerperal mania. Of the seventy cases analyzed in this paper, twenty-nine, or over forty per cent., recovered. About two-thirds of the recoveries occurred within eight months from the beginning of the attack.

In conclusion, the important question presents itself as to the relationship existing between diseases of the sexual organs and the various neuroses of the menopause. That this relation is a close one is proven by the immense number of recorded cases which have borne the crucial test; *i. e.*, prompt amelioration of the nervous symptoms upon removal of the utero-ovarian disease. The time allotted this essay prohibits the introduction of illustrative cases, which is, however, the less a source of regret since, doubtless, the note-books of all present offer abundant confirmation of the propositions advanced. There can be no doubt that, in many cases, the nervous disturbances are aggravated by morbid conditions of the pelvic viscera. Many women who suffer severely at the change would escape with little inconvenience, were it not for the superadded irritation of the pelvic disease.

But, on the other hand, the cases are not few in which the neurotic affections exist independently of all complicating disorders of the sexual or other organs of the body, the peculiar nervous instability of the menopause being alone responsible for the symptoms. Perhaps it may not be amiss in an Association where every disease

is viewed through gynecological spectacles, to suggest that, in some cases, the pelvic symptoms themselves are *caused by*, not the *cause* of, the nervous disorders. The vicious circle begins in the nerve centres, not in the pelvic viscera. To ignore this fact and consider the latter alone is wholly to misinterpret the neuroses.