THE MALE CLIMACTERIC.

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The idea that a man passes through a period comparable to what in the woman is known as the menopause, is no new one. In ancient medicine a grand climacteric was recognized and was placed at the age of sixty-three. Those modern writers who recognize its existence are inclined to place it earlier; Max Thorek in the early fifties, Max Marcuse between forty-four and fifty-four, and Havelock Ellis even so early as thirty-eight. But before discussing the merits of these different assessments, it will be useful to investigate what is meant by the term "male climacteric." By what signs can its arrival be recognized? What is its underlying pathology?

When one looks at the whole life of an individual man from birth to death, at first sight, it appears that the processes of growth and decay proceed without pause or interruption—one stage imperceptibly leading on to another, so that it is impossible to say when one ends and another begins. But a closer scrutiny suggests that our first impressions are incorrect. The onset of changes at certain periods of life is comparatively abrupt. This is particularly obvious in the case of the period known as the onset of puberty. At the age of twelve we see a child unconscious of sex, free of restraints, natural, and entirely occupied with the affairs of childhood. Within a year all this may be changed, and in place of a child we may find a miniature adult, a young girl, self-conscious, reserved, awkward in the presence of her one-time companions, given to blushing, full of unresolved problems. Puberty has marked a definite step forward in the long journey from birth to death. A period of intense activity and disturbance in the circle of endocrine glands has been followed by a comparatively abrupt change in bodily form and psychology.

Although no other step is so clearly marked as that of puberty, I believe that, if one held the view that the various stages of development and decay were ushered in by a series of jerks rather than by a gradual transition, there could be found much evidence to support this thesis. How often are parents struck by the sudden realization that their infant has, at a bound, become a child! How often do we feel with a shock that some relative or friend has, in a brief period of time, taken on old age! If this is so, there is nothing inherently improbable in the view that, on the downward slope of life, there is a sudden change—an involution comparable to the evolution of puberty on the other side of the hill.

In the case of the female this is apparent. At one time a woman is capable of carrying out the chief function of her being, namely, the bearing of a child, and a year later she has lost her capacity for doing so. She has passed through the menopause. What reason is there to believe that the male passes through any change that is comparable to this?

If we regard the sudden termination of the power to reproduce as the central fact of the climacteric, then, at once, we may answer that nothing comparable happens in the case of a man. He may retain his power to reproduce into a ripe

old age. I have examined sections of the testis of a nonagenarian, and found in it active spermatogenesis. Instances of paternity in the eighties are comparatively common. Therefore, as Maranon has pointed out, the term "menopause," when applied to a man is a misnomer, if by menopause be meant a sudden termination of sex life. For this reason the terms "climacteric" or "critical age" are preferable when speaking of the male, since these do not necessarily imply a cessation of the power to reproduce. In a man the retention or the loss of the power to breed is incidental. His climacteric should be regarded as a stage in his organic evolution, a stage that is often associated with a diminution or even a loss of his sex, but not necessarily so. As in the case of the female, the biological foundation on which this critical period rests, is an upset and a subsequent readjustment of the endocrine mechanism.

The reason for this important distinction between the male and the female climacteric is easy to find. We do not have to look far in order to discover why it is that a woman, at the climacteric, must of necessity lose the power to reproduce, whilst a man may often retain it. In the economy of the woman everything has been sacrificed to the primary purpose of her being, namely reproduction; in the economy of the man nothing has been sacrificed to it. Reproduction to him is a function of secondary importance, and one that makes small demands on his strength. He can therefore afford to carry on the work of procreation, even when his physical powers have begun to wane. With a woman it is otherwise. Reproduction imposes on her a heavy burden, of which it is essential that she should be relieved when her physical powers decline. The involution of her genital tract is therefore an essential part of her climacteric.

If we regard the endocrine changes as of primary importance in the study of the climacteric, and the genital changes as secondary, there will be found much to support this view that the male passes through a period of disturbance and readjustment comparable to that of the female. Personally, I am inclined to place this period in most men's lives between the ages of 55 and 60. It is during these years that we see in them many of the signs and symptoms that are characteristic of the more clearly defined female menopause. For example, a tendency to put on or to lose weight, an emotional irritability, and in a certain number of cases, marked psychological disturbances. Havelock Ellis points out in his "Psychology of Sex" that Thomas Mann, the distinguished German novelist, adopts this as his theme in "Der Tod in Venedig." In this story we are shown an excellent example of a victim of a pathological male climacteric.

Not infrequently, the emotional and psychological disturbance has a sexual character, manifesting itself in a sudden flare of the dying embers of desire. Sometimes this gives rise to nothing more serious than a conflict between the heightened desire and the capacity to satisfy it, but sometimes it has more serious consequences. The disturbances of the male climacteric often supplies the true explanation of the Hyde Park Scandal, dear to the news editor of the evening paper and the policeman. An eminent gentleman is arrested for acts of indecency. Exhibitionism, a desire for young girls, and when a homosexual tendency has existed much earlier in life, a return to this youthful attitude may be also a manifestation of the pathological thought and feeling of the male climacteric.

Hirschfield believes that these pathological manifestations are more common amongst unmarried men and widowers. They are also, according to Max Marcuse, more likely to be displayed by what may be termed the sexually inadequate man.

or by the man whose attitude to sex has always been slightly abnormal. That is why the fanatical moralist, to whom sex experience has always appeared in the guise of the sour grapes of *Æsop's* fable, is not infrequently discovered amongst the elderly sexual delinquents of the police courts. Thus does it occasionally happen that a punishment fits the crime.

The psychological changes associated with the climacteric may, however, show themselves in other guises than the sexual, in irritability, in moodiness, in meanness, avarice. Fortunately, after a short period of disturbance, the victim of the climacteric may ultimately achieve a happier and calmer outlook on life than he possessed before. Exchanging an active attitude for a passive one, he becomes an onlooker in life, viewing it with more detachment and more understanding. If he is a painter, a writer or a musician, the changes in himself will be reflected in his work; in it will be noticed some new character that was not there before. It is the climacteric that has marked off the later from the earlier phases of the work of some of our great painters and writers.

Associated with these psychological changes, are others of a purely physical nature. In a Hunterian lecture delivered as long ago as 1922, I wrote, "... the close dependence of the prostate on the ductless glands during its period of development affords sufficient ground for considering carefully the possibility that enlargement may be associated with changes in the endocrine system. The menopause in the female is generally accompanied by a temporary loss of endocrine balance, and it is not improbable that a similar state of affairs may arise during the period of sexual decline in the male." My prophecy that prostatic enlargement would some day be linked up with changes in the endocrine system, was the result of a comparison of the histological changes found in the prostate with those seen in the breasts of middle aged women about the time of the menopause. Such similarities suggested to my mind a common *ætiology*. My guess has been proved correct. We now know that enlargement is due to an upset in the balance between the anterior pituitary and the hormones of the sex gland. An enlarged prostate may, therefore, be regarded as an accident of the male climacteric. So also, in my opinion, may the epididymal cysts and hydroceles from which men in the late fifties and early sixties are so likely to suffer. They are all indications of the involution of the genital tract occurring at the time of the climacteric.

What bearing on practical medicine has this theory of the existence of a male change of life? It may be answered that, at the present time, it is of little practical value. It gives us, perhaps, a better understanding of certain conditions with which we may be called upon to deal; it furnishes us with an explanation of certain phenomena that were previously inexplicable. For the moment, that is all, but in the future it may be otherwise. Already we are beginning to attempt to deal with prostatic enlargement by endocrinotherapy. The isolation of the male hormone has put into our hands an instrument that may prove of great value in combating the accidents of the climacteric. At present, it is an instrument that is so costly that few can afford to employ it, but with better methods of extraction or of synthesis, the cost of male hormone will eventually fall, so that we will be able to give it in sufficient quantity to bring about results. It must be remembered that, when we treat a case of prostatic enlargement with male hormone, we are attempting to reverse a body process. Gross changes have occurred in a prostate, changes that are presumably the result of a long-standing deficiency of gonadal hormone. In order to cure the patient, we have not only to arrest this process, but actually to reverse it. We are,

therefore, attempting a big task and it is not surprising that few positive results have so far been obtained, with the small amount of material that has hitherto been at our disposal. What success will be attained with the large doses of such preparations as testosterone propionate, that are now being used, remains still to be seen.

Having ventured to prophecy sixteen years ago that some day prostatic enlargement would be treated by means of endocrine therapy, I am bold enough to hazard another guess. Even if the latest method of treatment fails to produce results, I am convinced that, eventually, the patient suffering from signs of early prostatic enlargement, will pass out of the hands of the surgeon into those of the physician. But by that time, I shall have retired from my profession.

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