Baer (B. 71)

WITH THE COMPLIMENTS OF THE AUTHOR.

THE SIGNIFICANCE OF METRORRHAGIA RECURRING ABOUT AND AFTER THE MENOPAUSE.

Read before the Obstetrical Society of Philadelphia, March 6th, 1884.

BY

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Reprinted from THE AMERICAN JOURNAL OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, *Vol. XVII., No.* 5, 1884.

NEW YORK:

WM. WOOD & CO., PUBLISHERS, 56 & 58 LAFAYETTE PLACE,

1884.

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METRORRHAGIA, recurring about the menopause, is as likely to be the result of disease in the uterus, or its appendages, as it is at any period previous to that time.

The popular belief that flooding at the change of life is physiological often results in harm, and should be discouraged. But many physicians also believe that profuse hemorrhages are often necessary at the period of the menopause; that the blood-loss is depuratory or critical, and that it protects the vital organs from injurious or even fatal congestion. This, I think, is erroneous; for if it were true, many more cases of metrorrhagia ought to be met with at this period, or more women should suffer and die from cerebral or other internal congestions, as a result of the absence of hemorrhage. But statistics show that the mortality for the five years from forty-five to fifty is no greater than the ordinary increase for each five years of advancing age, and that it is no higher in females than in males for the same period of life; and investigation

proves that in those women in whom the cessation is gradual and without more than the ordinary menstrual flow, better health is enjoyed then and afterwards than where the so-called critical floodings recur.

Where health exists, the cessation of menstruation will be attended by no more aberrations of function than are seen in its establishment. Temperament and idiosyncrasy are modifying factors, but where deviations from the normal standard are marked and persistent, they should be regarded as pathological, and the cause sought for.

Those women who suffer at puberty and at the catamenial periods are almost certain to suffer at the menopause, and the cause is usually found to exist in an imperfectly developed sexual system and a nervous susceptibility. Where puberty and menstruation have been normally established and performed, and where much suffering is experienced at the change of life, the cause will very generally be found in a pathological condition of the uterus or ovaries, the result, probably, of injury at parturition, which may or may not have given rise to symptoms previous to the period of life at which menstruation usually ceases.

An analysis of twenty-two hundred cases that consulted me in hospital and private practice during the last five years, for symptoms referable to the sexual organs, and of which I have notes, corroborates the propositions that I have advanced above, and seems to show that fewer women suffer at the menopausal age than before it, and that the percentage of cases of metrorrhagia is less in those from forty to fifty than in those from thirty to forty years of age.

The character of the symptoms and the cause of the hemorrhage, however, differ somewhat. I confine the analysis to the cases which presented themselves within these five years, because my experience and observation were more fully matured, and my notes more trustworthy in consequence than in the cases treated previous to that time, and especially since the number is sufficiently large.

Of the 2,200 cases,

145 were from 15 to 20 years of age.
393 " 20 " 25 "
443 " 25 " 30 "

364	were from	30	to 35	years of age.
333	"	35	" 40	"
223	"	40	" 45	"
139	"	45	" 50	"
96	"	50	" 55	"
33	"	55	" 60	"
31	were above	60		"

Total, 2,200

This table shows that nearly the same number of women sought advice during the five years in which the establishment and decline of menstruation usually occur, one hundred and forty-five for the former period, against one hundred and thirty-nine for the latter; and it further shows that the numbers rapidly increase as the period of greatest fecundity is reached, and decline after it is past. Thus fifteen hundred and thirty-three were from twenty to forty years of age, whilst there were only six hundred and sixty-seven for all other ages.

It is true that there are not so many women living after forty as before that age, but the difference is only slight, compared to the difference in my figures, for during the ten years from thirty to forty there were six hundred and ninety-seven cases, and only three hundred and sixty-two in the succeeding ten years, from forty to fifty, a decrease of nearly one-half. It is also true that this great disparity in the numbers for the two periods may be accounted for in a degree by the fact that suffering at the latter period of life is accepted by many women as unavoidable and proper, and they therefore do not seek advice until compelled to do so by the severity and persistence of the symptoms. However, that will apply to the majority of cases of all ages, for they all alike procrastinate, through feelings of delicacy or from carelessness, until a stage of disease is reached when a cure is difficult, and often impossible.

The percentage of cases of metrorrhagia is likewise shown to be smaller in the decennial period from forty to fifty, than in that from thirty to forty, for six hundred and ninety-seven of the twenty-two hundred belonged to the latter period, and of these one hundred and ninety-nine, or about twenty-eight per cent, suffered from meno- or metrorrhagia, more or

less severe; while of the three hundred and sixty-two cases which belonged to the former period, only seventy-three, or about twenty per cent, suffered from the same symptoms. The smaller percentage for the former period appears more remarkable when we remember that it includes not only the age of cessation, but also that which is correctly recognized as the "cancerous age," for a much larger percentage of uterine cancers occur in the ten years from forty to fifty than in any other decennial period, and these cases are necessarily attended with hemorrhage.

Forty-one of the twenty-two hundred women were affected with malignant disease of the uterus, and were aged as follows: Twenty-six of the forty-one cases occurred within the fifteen years from forty to fifty-five, only three below thirty-five, and five above fifty-five, and the average age for the whole number was about forty-six years. If we take an equal number for each period and reject those who suffered from malignant disease, the relative percentage of cases affected with metrorrhagia about the menopause is shown to be very much smaller than before it.

I believe that it ought to be an axiom in gynecology that flooding at the menopause is never physiological, but always the result of disease. The pathological factor may be difficult to find in some cases, but I think the instances in which it cannot be discovered are so rare that an acceptance of this principle would prevent much suffering and save life; for who can doubt that the constitution is less able to resist the advance of disease after having been subjected to repeated and exhausting hemorrhages, than where such loss has not been met?

I think that we are correct in believing that epithelioma of the cervix may result from injury of that organ, but we must also believe that the local lesion is not of itself sufficient; it merely prepares the ground or supplies the exciting cause; the predisposing cause has a deeper origin. For that we are compelled to go back to some peculiarity in the structure of the tissues of the individual (inherited), which renders them susceptible to an induced dyscrasia. If cancer of the uterus were simply the result of local injury—laceration of the cervix, for instance—there should not be such a vast difference between the number of cases of cancer and of laceration of the cervix.

Emmet, "Prin. and Prac. of Gynecology," p. 451, says, "that 32.80 per cent of all women under observation, who had been impregnated, and had suffered from some form of uterine disease, were found to have laceration of the cervix," and I do not think his estimate much too high if we include all forms and degrees of the injury. But the percentage of cases affected with epithelioma is, according to the same authority, only about two and a half per cent, and this agrees with the statistics of most observers, as well as with that given in this analysis. The same eminent author on p. 496 makes the statement that, "those who suffer from this form of cancer about the time of a change of life are, without exception, from a class who have enjoyed more than the average degree of health," and a little farther on are these words: "I believe that nearly all, if not all cases of epithelioma or cauliflower growth have their exciting cause or origin in a laceration of the cervix." Now, the fact that thirty-two per cent of the fertile women who consult a gynecologist should be found to have a laceration of the cervix and only about two and a half per cent of them should be affected with epithelioma, causes one to doubt, at first glance, the correctness of the prevalent belief concerning the causative relation which laceration sustains to cancer of the cervix. Then, it seems contradictory to say that the cases of epithelioma come, "without exception, from a class who have enjoyed more than the average degree of health," and to follow with the statement that "nearly all, if not all cases have their exciting cause or origin in a laceration of the cervix," for we all believe that where laceration exists the subject suffers, as a rule, in consequence, and therefore could not belong to a class in which, "without exception, more than the average degree of health is enjoyed." It is true that some cases of cancer have apparently possessed unusually good health previous to the development of the disease, but they do not enjoy this immunity *without exception*, nor in the majority of instances. Where these cases are closely questioned regarding symptoms of uterine disease, such symptoms will usually be found. Then, the fact that so many of the women who are found to be suffering with cancer have been for years the subjects of acquired sterility would indicate that they do not really enjoy the

freedom from disease which they are led to imagine themselves from the absence of marked symptoms. Thus, twenty-one of the forty-one cases of cancer in my analysis had not been impregnated within ten years, some of them not in fifteen years, and in several cases more than twenty years had elapsed since the birth of the last child. When a woman, who has been regularly bearing children, suddenly ceases to do so in the midst of the fertile period, there is often some local cause for it, and when this circumstance is so commonly found to precede the development of epithelioma of the cervix, there must be some causative relation between acquired sterility and cancer, as there almost certainly is between congenital sterility and fibroid degeneration of the uterus; and as epithelioma seldom or never develops in a uterus which has not undergone the changes of gestation, or been subjected to the local injury which often attends parturition, we are driven to the conviction that the latter process prepares the ground for the growth of cancer of the uterus. But we must still believe that there is an individual predisposition, either inherited or acquired, back of the local one, else more cancers ought to occur, in proportion to the number of lacerations. However, this cause cannot act unless the tissues have been previously prepared for it by parturition, and the strongest proof of that is found in the immunity which sterile women enjoy, for the same predisposition must exist in many of them.

Practically, therefore, it is safer to regard the disease as of local origin, for we will then endeavor to discover and remove all sources of irritation, and possibly prevent its development or arrest it in its incipiency.

That it is sound practice to regard metrorrhagia about the menopause on the same basis as at any other period, viz., as the result of local disease, is shown by the following case, which is typical of its class:

CASE I.—Mrs. Q., residing in a neighboring State, entered one of my private rooms in October, 1883. She was forty-seven years of age, married and had three children, the youngest of which was aged twenty-two years. She had had a miscarriage two years after the birth of the last child, or twenty years ago, but since then she had not been pregnant. In the interval between the occurrence of the miscarriage and the beginning of the present trouble, she suffered occa-

sionally from leucorrhea and slight menorrhagia, with pain in the sacrum. But of this she gave little heed, and considered herself well. About three years ago she began to lose more than the usual amount of blood at her catamenial periods, and the quantity gradually increased with each recurrence, until it amounted at times to a severe flooding. The intervals between the hemorrhages, which were becoming shorter, would be characterized by a watery, fetid discharge. When she became anxious regarding the loss of blood, which she did as soon as she found that her strength was failing, her fears were set at rest by the "wise old ladies" of her circle, who ascribed it all to the "change of life," and advised her to let "nature take her course." And nature did take her course, for as the metrorrhagia and the fetid discharge continued, she became pale and began to lose flesh. Being now thoroughly alarmed, she consulted her physician, an able and conscientious gentleman, but who was unfortunately biased in favor of the theory that flooding at the menopause is physiological. He made an examination, which consisted in the vaginal touch, simply, and found that the cervix uteri was hypertrophied and lacerated, and that the body of the uterus was also somewhat enlarged. However, he informed her that this was not enough to produce the hemorrhage, that it must be the result of the approaching cessation, and advised her not to worry about it. This was nearly a year previous to the date at which she consulted me. She impressed me, when I first saw her, as one in the last stage of malignant disease, and I imagined that I could detect the peculiar odor of cancer, so great were the anemia and cachexia. She was jaundiced and suffered from vertigo and tinnitus aurium, had lost all desire for food, was emaciating and had become so weak that she could scarcely maintain the erect posture without fainting. She was in such constant dread of sudden death that she had become painfully hysterical.

I found, on physical examination, that the cervix uteri was considerably hypertrophied, soft, and lacerated; but the laceration was not a deep one. The os was patulous and dilatable, and the mucous membrane of the cervical canal was congested and abraded. There was nothing about the cervix to indicate epithelioma. The body of the uterus, as outlined by conjoined manipulation, was found to be as large as at the third month of gestation; it was also symmetrical, smooth, and softer than normal. I next attempted to pass my finger into the uterine cavity, but it was arrested at the internal os by a mass of tissue which was of the same consistence as that of the uterus, probably not so firm as the latter, but it was not friable. The sound, when passed to the left of this mass, could be made to enter to a depth of four inches, but when passed to its right it was arrested at a depth of three inches. The manipulation so increased the hemorrhage that it was necessary to tampon the vagina to control it. Of course, I diagnosticated a fibrous polypus, but feared that it might possibly prove to be a malignant growth from the mucous membrane.

On the next day the patient was anesthetized, and I adjusted the noose of a wire écraseur around the attachment of the tumor to the uterine wall, and severed a thick, firm pedicle, and then delivered the growth through the os uteri. These manipulations were rendered more difficult than usual because the os was not previously dilated with tents; but as the tissues of the cervix were soft and dilatable, I chose rather the more difficult manipulation than the danger of septicemia, to which a patient in this condition is always more liable from tents. The tumor proved to be a fibrous polypus as large as a hen's egg, and it was a benign growth. Exploration of the uterine cavity with the finger showed it to be free from other disease. Two weeks after the removal of the polypus, the general condition of the patient was so much improved, and the cavity of the uterus so well contracted and free from discharge that I operated for the lacerated cervix, and secured primary union. Her recovery was uninterrupted, and no blood has been lost since the removal of the tumor, except that resulting from the operation for the restoration of the cervix; she has not even menstruated, and I believe that the menopause has been established.

It is very probable that this patient would have died from the hemorrhage produced by a benign disease had the polypus not been discovered and removed. There is another danger to which women suffering from metrorrhagia at this period of life are exposed from the fallacy of regarding the hemorrhage as physiological or critical, to which I wish here to refer. Cancer of the uterus is properly regarded by many excellent physicians as necessarily fatal, and they therefore look upon operative interference as futile, and unwarrantably subjecting the patient to the pain and danger of an effort to eradicate or even palliate the disease. Suppose, now, that this lady had consulted some one who held such views, and that he had concluded from the history, symptoms, and general appearance of the patient that it was a case of cancer—which it resembled very closely—and then, on superficial examination, the soft mass in the cavity of the uterus had been pronounced malignant and non-interference advised. The patient would have been allowed to die from the hemorrhage caused by a benign and easily removable tumor.

CASE II.—On July 9th, 1883, my friend, Dr. D. P. Pancoast, of Camden, requested me to see with him the patient whose history follows: Mrs. S. was forty-two years of age, and a widow. She had had five children, the last one six years ago. Her labors had been unusually difficult. During the last three years, she had suffered from a peculiar sensation in the left iliac region, as

though something were contracted or too short, for the effort of reaching across the table or raising her arms, for instance, would produce a pain or soreness at that point.

About two years ago, she found that she was loosing more blood at the catamenial epochs than usual, and that her strength was failing as a result. No cause could be found for the hemorrhage, and it was attributed to the change of life. The patient was advised to submit to the loss until such change should have been reached. But the hemorrhage rapidly increased until she was rarely free from it, and she was extremely emaciated when Dr. Pancoast was consulted. The doctor found the os uteri widely dilated, and a mass of tissue, polypoid in form, projecting from it; this he suspected to be malignant. My examination confirmed his suspicions, for the growth was of a very friable, vascular character, and in passing my finger into the uterine cavity I found that it originated from many points on the surface of the mucous membrane. The cervix was lacerated, but was not involved in the disease; the body of the uterus was mobile.

I considered the advisability of hysterectomy, as the disease seemed to be confined to the uterus, but concluded that if the procedure is ever justifiable, which is doubtful, it was not so here, for our patient was in such a low condition that she would almost certainly have succumbed to the operation. To check the hemorrhage for a time and rid the patient of the degenerated and decomposing tissue which was rendering her life a burden, we advised an operation for the removal of all that could be scraped away, to be followed by cauterization of the surface, and this was done.

The improvement of the patient was so rapid that within a month she was able to visit friends who lived at a distance. The hemorrhage and other discharges had ceased and her color and weight had been restored to a remarkable degree. But the respite was only temporary, as we had anticipated, for a few months afterwards she died of acute peritonitis, which, I think, resulted from hemorrhage into the peritoneal cavity.

Case III.—R. X. consulted me in March, 1880. She was then æt. forty-two years, married, had two children, and the youngest was ten years of age. Since the birth of the last child her menses had been rather profuse, and she had had some leucorrheal discharge, with slight inconvenience in the pelvis and pain across the sacrum. Six months previous to the date at which I first saw her, she had an attack of metrorrhagia which lasted two weeks, and this had been repeated frequently within that time; she had not been able to go out of the house, and rarely to leave her room for three months. She had lost more than twenty pounds in weight, had become pale, and suffered from great nervous prostration.

Examination showed the uterus to be slightly retroverted, considerably enlarged, and not freely movable. The cervix was

somewhat hypertrophied, but otherwise was normal. The sound was passed through the internal os with difficulty, on account of some obstruction met with at that point, and indicated the uterine cavity to be large, soft, and rugous; and its withdrawal was followed by a very fetid sero-purulent discharge. I diagnosticated fungous hypertrophy of the endometrium, but feared, from the degenerated condition of the tissues, that it might be malignant. I at once decided to dilate the cervical canal and remove the disease as far as possible; and for that purpose four tents were inserted.

When they were removed, twenty-four hours later, the os was so patulous that the index finger could be readily introduced into the uterine cavity, which was found to be festooned with ridges of hypertrophied tissue. This was soft and ulcerating on the surface, but it was firm at its attachment to the uterine wall, not friable. I removed, by means of the polypus forceps and the sharp curette, all of the redundant growth, aggregating enough to fill the palm of my hand, and then thoroughly cauterized the surface with nitric acid.

As soon as the patient had recovered from the immediate effects of the operation, I placed her upon the enforced discipline and diet of the "rest treatment," together with tonic and alterative medicines appropriate to her condition. Perfect cleanliness and an occasional application of equal parts of Churchill's solution of iodine and pure carbolic acid to the uterine cavity, completed the local treatment. Three months after the operation, she had gained fifteen pounds in weight, and was otherwise so much improved that she felt that her health had been entirely restored. There had been no return of the metrorrhagia, and the cavity of the uterus appeared to be free from disease. She went now to spend the summer in the mountains of Pennsylvania, and when she returned in the fall she looked the picture of health, and assured me that she was as well as she had ever been. Careful examination was made at this time, and I failed to detect any signs of a return of the malady.

Four years have now elapsed since the operation, and this lady enjoys good health; there has not been the slightest evidence of a return of the disease, and examination of the uterus confirms the outward appearances, for it seems to be in a normal condition. But the menopause has not yet been established.

According to the opinion of my friend, Dr. H. F. Formad, who kindly examined the specimens removed from Cases II. and III., the microscope showed them to be of like malignancy ("endothelial cancer"), differing only in the stage of the disease.

These cases present the two extremes of the disease, and very forcibly illustrate and strengthen the position which I have taken as to the cause and treatment of metrorrhagia at

this period of life; and they show the value of seeking for and removing the source of the hemorrhage without delay. For if the same decisive plan of treatment had been followed in Case II. as in Case III., when the first signs of the pathological change were manifested, the life of the patient would very probably have been prolonged, and possibly saved, *i. e.*, the disease eradicated; for there is a possibility that this form of disease in this locality (uterine cavity), is not essentially malignant in its incipiency, but only becomes so after the health has been undermined by a prolonged drain upon the system, thus destroying the inherent resisting power, or plastic force, of the tissues, and allowing an activity of a lower type to take its place.

This principle will also apply to epithelioma of the cervix, though in a minor degree, for, while it is almost certain that this form of cancer is a necessarily fatal disease from its beginning, it is just as certain that if it could be discovered in its earliest stage and were removed as thoroughly as possible, an untold amount of suffering would be saved, and many years of life added to this most unfortunate class of cases.

But how discover the disease in its incipiency? An important question, the solution of which would be potent for good. It can never be hoped for until we come to regard all irregular discharges from the uterus as the result of local disease, requiring immediate intelligent investigation, and to teach women to so regard them. It is true that, in many cases, the disease is so far advanced before the stage of ulceration is reached, upon which the discharges of cancer usually depend, that little, except to palliate the symptoms, can be hoped for; but there are also many exceptions; some in which the disease begins as a superficial ulcer; others in which the growth partakes of the nature of a papilloma in its early stage, and in these cases very much towards prolonging life and alleviating suffering may be accomplished. It is unnecessary to occupy your time in citing cases of early and late operative interference to illustrate and prove this, for every gentleman of experience present will substantiate it. Then, by healing all sources from which these discharges originate, of whatever pathological character, it is possible that the soil, fertile for the development of the affection, may be destroyed, and its growth prevented.

"The change of life is a time of turbulent activity for the reproductive organs," says Tilt; but I believe that this is true only so far as regards tendency or predisposition; that an injury, which may have given rise to only slight inconvenience before, when the organs were actively engaged in the performance of their proper functions, may now be instrumental in developing a lower form of tissue; but this is pathological; it is not an inherent condition.

Why should there be a necessity for the traditional flooding at the menopause? It has no analogy in comparative physiology. It does not relieve symptoms, for it is in those very women who suffer most from irregular hemorrhages at this period that the so-called signs of the approaching change of life are most marked. Apoplexy is very uncommon in the female at this period, and when it does occur, it probably results from degenerative changes in the tissues of the blood-vessels, induced by some form of dyscrasia, and not from plethora. I believe that women suffer less about the menopause since venesection has been abandoned than when it was practised regularly..

CASE IV.—Mrs. W. first consulted me in January, 1878. She was then forty-three years of age, had six children, the youngest being æt. twelve years. She had suffered from menorrhagia since the birth of the last child, and recently from metrorrhagia, which would amount to enough at times to be designated a "flooding." She had also occasional attacks of rectal hemorrhage during the last few years. In addition to the loss of blood, or as a result of it, she suffered intensely from the burnings and flushes, vertigo, palpitation, dyspepsia, and other nervous disturbances to which women at this age are especially liable when the functions of the generative system are not performed properly.

The uterus was found to be large, soft from engorgement, and sharply retroflexed. The cervix was involved in the general congestion and hypertrophy of the uterus, but was not otherwise diseased. The uterus was mobile and not tender on pressure. The sound, when passed to the fundus, indicated a uterine depth of three and one-half inches, and a soft, hypertrophied endometrium. Except in partaking of the general congestion, the pelvic tissues and organs around the uterus appeared to be in a normal state. Examination of the rectum, however, showed the hemorrhoidal vessels to be in a varicose condition.

The plan of treatment followed in this case was one, of course, designed to restore tone to the uterine and pelvic vessels and tissues, to thereby reduce the amount of blood circulating in that locality; and it consisted in the reduction of the retroflexion,

the application of the appropriate remedies to the uterine cavity, and the occasional use of the curette, together with the general medication indicated. It is sufficient for my purpose to state that, as the metrorrhagia diminished and the catamenia became more regular, the nervous and other symptoms subsided; but when the hemorrhage would return, which occurred a number of times during the next two years, at the end of which time the menopause was fully established, these symptoms would likewise return. After the cessation of the catamenia, the patient remained well, until she began again to lose blood from the rectum, when the nervous symptoms returned with such severity as to suggest that the hemorrhage was probably vicarious, or supplementary to the menstrual flow. The vertigo was especially marked, so much so that the patient was in dread of apoplexy, and thought that the hemorrhage was conservative. I, however, regarded the vertigo and many of the other symptoms as the result of anemia, and advised the removal of the hemorrhoids, which were now large. So convinced was the patient that she was in danger of death from apoplexy that she prevailed upon her physician to bleed her from the arm, on several occasions. This had no other effect than to quiet, for a time, her disordered mental condition, and she finally consented to submit to the operation; the hemorrhoids were removed by ligation, about eighteen months ago. She has lost no blood since, and she informed me recently that she had been in better health during the last year than at any time during the preceding ten years. The uterus is in normal condition, undergoing senile atrophy, and the reflex symptoms have disappeared.

I do not think it can be said that the metrorrhagia in this case was at any time physiological, or that the hemorrhage from the rectum was conservative, in protecting the patient from apoplexy or other grave disease.

My experience would teach me that where the menopause is retarded beyond the usual period, the cause can often be found in some disease connected with the sexual system, which interferes with the pelvic circulation; and, as a rule, it is an old standing trouble; sometimes only the remains of a pathological process which was thought to have long since passed away, but which had only been lying dormant, ready to oppose, under a new influence, the natural law which would deprive it of power to act. I refer again to injuries received at parturition which were only partially healed, but more especially to those which had been followed by pelvic inflammation, resulting in uterine and ovarian adhesions by false membranes, and in hypertrophy and contraction of the broad and utero-sacral

ligaments. Such a condition as that almost always retards ovarian and uterine involution, by causing an abnormal amount of blood to flow to those organs in response to the irritant, and by retarding its return through pressure on the veins.

This results in uterine plethora, which is often followed by a development of new-growths from the mucous membrane or in the walls of the uterus, and in irregular discharges of blood from the uterine cavity. The ovaries may at this time, and under the same pathological influence, begin to undergo cystic degeneration. Under the latter circumstances, the metrorrhagia usually ceases, but not necessarily.

In single and sterile women, the menopause is sometimes retarded by the presence of a fibroid tumor in the uterus; but if the tumor be of the hard subperitoneal variety, it may have the opposite effect, and cause the cessation to occur prematurely.

When metrorrhagia recurs after the menopause has been fully established, it is almost invariably the result of a pathological change in the tissues of the uterus. This is sometimes secondary to disease in the ovaries, but, as a rule, the disease begins in the uterus itself. I have never met with an instance of the return of the catamenia after the menopause; yet I am not fully prepared to accept the statement of Dr. T. G. Thomas that "there is absolutely no such thing as a return of the menses when a woman has once reached the normal menopause," for there are some cases recorded by Tilt and others which seem to controvert such a sweeping assertion. However, the authenticated cases are so rare that they may practically be excluded from consideration.

In the majority of cases, the hemorrhage results from carcinoma, but the exceptions are sufficiently numerous to make the following statement from the same author appear likewise too strong: "If these cases could be followed out, it would be found, with scarcely a single exception, that the uterine flow was merely the indication of the presence of malignant disease" (*New York Med. Jour.*). Where the menopause has not been delayed, but has occurred normally, the uterus and its appendages, as well as the pelvic vessels and tissues connected with them, undergo senile involution or atrophy, in which event it is doubtful whether metrorrhagia ever returns.

But this natural process is sometimes retarded by obstruction to the pelvic circulation or by the presence of some irritant which determines an unusual amount of blood to the parts, as referred to above, and in these cases, although menstruation had long since ceased, the uterus does not undergo this senile atrophy, but remains large, and the blood-vessels, being weakened by age, more readily break down and bleed, simply from passive congestion, maintaining a sort of periodicity from the old habit.

This abnormal blood supply is apt to result in hypertrophy of the mucous membrane and the development of polypi, as in the following case, with the relation of which I will conclude.

Case V.—Mrs. K. consulted me in January, 1880. She was then seventy-two years of age, and had been a widow thirty-seven years. She had had six children, the last one thirty-eight years previously. After more than the usual irregularity in the menstrual flow, the menopause finally occurred at the age of fifty-two. During the next five years there was no discharge whatever from the uterus, but at the end of this time, or when she was about fifty-seven, she experienced great grief in the departure of a favorite son for the West, and her menses, as she thought, returned in consequence. From this time she continued to lose blood at intervals which were rather regular, and she accepted the event as an evidence of rejuvenescence. The bleeding was at no time profuse, but it ultimately began to affect her health, and she sought advice fifteen years after the first appearance of the hemorrhage.

On touching the vagina, I found presenting at its orifice a soft mass of tissue, which extended up to the os uteri; it was large enough to entirely fill the vagina; it looked and felt much like a bunch of grapes, and resulted from a follicular degeneration and hypertrophy of the mucous membrane lining the cervical canal. It was probably four inches in length, and half as broad as my hand. After the polypus had been removed, the cervix was found to be large, soft, and the seat of an old laceration. The veins on the surface of the mucous membrane were dilated, and the uterine canal was patulous throughout, and measured three and a half inches in depth. Under the influence of local and general medication, the uterus contracted, and within a few months after the removal of the growth, it was much reduced in size, and seemed to be free from disease. The patient is still living and the metrorrhagia has not returned.

The fact that the hemorrhage began in this case simultaneously with the grief caused by the departure of her son on a

long journey is of interest from a psychological stand-point, but I think it was a coincidence. Possibly it may have had an influence on the generative organs, causing a hyperemia which, being kept up, may have resulted in the development of the polypus from the position of the laceration, but I prefer to take the more practical view, and ascribe it to a local cause.

2004 CHESTNUT STREET.