

DR. THOMAS McCRAE, Philadelphia: Regarding the opinion that in many cases of patients with high blood-pressure nephritis is latent, that is, without signs in the urine or anything to suggest clinical nephritis, it is important to consider what we mean by nephritis. If we say that a patient with high blood-pressure, whose urine is absolutely normal, has latent nephritis, we are losing all definite meaning of the term nephritis used clinically. A patient may have nephritis and go several days without urinary signs, but if he has a pressure of 225, is in bed for a month, and we examine all the urine, do the functional test two or three times and find that he is functionally normal, and then say that because that man has high blood-pressure he has latent nephritis, it seems to me that our diagnosis is open to question. You may quote pathologic figures which show a large percentage of nephritis. But what is nephritis on the necropsy table? You may ask the pathologist to draw the lines exactly, but the better pathologist he is, the more he hesitates to draw these lines. We must keep in mind that in persons over 50 the vast majority of kidneys show changes which one man may interpret as nephritis, and another may regard as the changes which occur with the advance of years. In correlating figures we must know what each particular pathologist terms nephritis. Where do the cases belong which occur in women about the time of the menopause, who have high blood-pressure for a year or two years, which later falls to normal, the urine being perfectly normal? Is there any suspicion of nephritis in some of these cases? I think not. It is a question whether or not we are justified in considering that high blood-pressure always means nephritis, in the absence of other definite findings.

DR. W. W. TOMPKINS, Charleston, W. Va.: We are likely to emphasize the importance of symptoms by calling them too strongly to the attention of the patient.

DR. MILLER stated, if I understood him correctly, that digitalis given by the mouth did not increase the blood-pressure. I believe it has a contrary effect; that digitalis given by the mouth will increase the pressure as well as when given hypodermatically.

DR. WALTER L. BIERING, Des Moines, Iowa: It seems to me that there is much importance to be attached to the reference made to the nervous aspects of hypertension, particularly those attacks with lapse of memory, fainting attacks and very slight apoplectic seizures. I do not know just what Dr. Miller's explanation is for these. It seems that these attacks might be explained best by assuming the existence of vascular crises, intermittent closures of the vessels, as first described by Paul. It has appeared in the few instances in which subsequent examinations were possible that these particular nervous phenomena or cerebral arterial disturbances were most marked in cases in which there was an underlying nephritic disturbance or nephritic changes in rather definite arteriosclerosis or other arterial changes.

DR. A. C. GRIFFITH, Kansas City, Mo.: I am inclined to agree with those who have spoken of hypertension as due to some nervous phenomenon. In one case of hypertension the systolic pressure was 260 and the diastolic pressure 180. The pressure was reduced by rest, but no iodids of any description seemed to have any effect on the pressure. The patient, a woman about 60 years of age, was extremely nervous. The systolic pressure ran along from 260 down to 200 for two years. There was no change in the arteries, and no change in the kidney that could be detected by frequent examination of the urine. The functional activity of the kidneys was not changed at all by this hypertension; no dyspnea was particularly noticeable on exertion, and we could attribute the hypertension to nothing else than a neurasthenic condition.

DR. JOSEPH L. MILLER, Chicago: The subject which I discussed was permanent hypertension. I believe that nervous conditions are responsible for transitory disturbances of the blood-pressure, and that these disturbances of the blood-pressure may be of very high degree; but I believe that nervous influences are not commonly responsible for permanent high blood-pressure. I believe fully that pathologists dis-

agree as to what constitutes nephritis, and Dr. McCrae made a very suggestive statement when he said that the patient should be kept under observation and the urine examined over a long period of time. I believe that, if we examine the urine of these patients with high blood-pressure daily, perhaps over a long period of time, and they show no casts, as a rule, we may be surprised to detect occasionally showers of casts. He also referred to his functional kidney tests in these cases. I am of the belief that, if we follow one of these patients with high blood-pressure and without casts or albumin through a long period of time, with daily examinations of the urine, and make repeated functional kidney tests, we shall find after all that the majority of them do show evidence of kidney incompetence, but I believe that as time goes by we are going to ascribe more and more of our high blood-pressure conditions to renal changes.

I have tried, repeatedly, taking the blood-pressure of patients several times a day for several days before digitalis was administered, then taking it several times a day for days when the patients were under the influence of digitalis, and I failed to find any material difference in the blood-pressure during these two periods of time. Furthermore, Cushney, working in conjunction with McKenzie, also maintains that digitalis administered by the mouth, at least in ordinary doses, does not affect the blood-pressure.

CANCER OF THE UTERUS

SOME POINTS TO BE EMPHASIZED IN THE EARLY DIAGNOSIS *

RUFUS B. HALL, M.D.

CINCINNATI

It is desirable to consider the diagnosis of cancer involving the cervix, and that involving the body of the uterus, separately. Therefore, I shall take up first the early symptoms of the disease involving the cervix, and later those involving the body of the uterus.

Cancer of the uterus has received more attention from gynecologists than any other disease peculiar to women. One must be convinced by study of the literature that the large part of this energy in the past has been directed toward the perfection of operative technic rather than to the more important problem of early diagnosis. The technic of the operation by the vaginal or abdominal route, or by a combination of both, has been perfected until little more is to be desired along that line. But what has the profession accomplished in the last decade in early diagnosis of cancer, that has benefited these patients? Scarcely anything at all.

While the men engaged in this special work have made advances in the early diagnosis of the disease, it does not benefit the great majority of these unfortunate patients, because we have not taught the family physician, who sees these patients first, to make the diagnosis in time for early operation. That many patients come to operation too late to promise a reasonable hope of cure, every operator of experience must admit. If an early diagnosis is to be made, it must be through the education of the laity by the family physician. From past experience I am convinced that the laity will not be educated until we can in some way bring home to the family physician his great responsibility. The propaganda for education of the family physician as well as the laity, inaugurated by the American Gynecological Association at its annual meeting in 1912, and more completely elaborated at the Washington meeting in 1913, should be commended and encouraged with enthusiasm by the entire profession.

* Read in the Section on Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association, at the Sixty-Fourth Annual Session, held at Minneapolis, June, 1913.

I have little new to offer but would emphasize some of the early symptoms of the disease that are so often neglected.

The importance of careful supervision over women regarding their sexual organs during the cancer period of life, which could be arbitrarily stated from 37 to 47 years, cannot be overestimated. I do not wish to be understood as saying that we may not encounter the disease in patients much younger or much older, but such cases are not nearly so often seen. The most trivial complaint, let it be discomfort in the pelvis or back, associated with a little watery discharge or leukorrheal discharge, or pruritus, during this period, should be investigated at once. The patient should not be permitted to go four or six months, or even a year, without an examination to determine the cause of these symptoms, as most of these patients are permitted to do now, before their physician examines them. During the past five years, for every case of cancer of the cervix coming under my observation early enough for an operation that justified the removal of the uterus, sixteen others came too late. For the five years just preceding that period, the ratio was one to twenty-one. In cancer of the body of the uterus the ratio was 1:4. The vast majority had consulted their physician several times, seeking advice for symptoms that were directly associated with the pelvic organs, such as pain in the back, irritable bladder, vaginal discharge or a little bleeding between the periods, and were treated expectantly without a vaginal examination being made or even suggested.

It is true that many of these patients did not apply to their physician for a vaginal examination but consulted him for advice. It is the family physician's duty however, to investigate every case in which the patient gives symptoms referable to the sexual organs during the cancer period of life, just as carefully as though he believed she had cancer, until he proves that she has or has not. When every physician realizes how important it is to the patient for him to do so, we have the key to the situation. We shall then have a great saving of suffering and prolongation of life for this unfortunate class of women. I am convinced that if these women were carefully examined by the family physician early, he would have little or no difficulty in convincing himself that the patient had cancer or that there was something out of the usual in her condition, and he would seek a consultation. Early diagnosis is of great importance to the family physician, in addition to the great good rendered his patient, because these patients and their friends invariably criticize his management of the case if he has delayed making an examination or has neglected to make one when they find that the disease has advanced beyond the operative stage. This criticism would be avoided if he investigated the case and made the necessary examination as it should be made at once, when the patient first applied for relief.

In the early diagnosis of cancer of the cervix, one should not overlook the fact that trauma due to childbirth plays an important rôle in the etiology of the disease. More than 98 per cent. of cases of cancer of the cervix occur in women who have borne children. Heredity does not appear to have as much bearing on the disease as it apparently does in carcinoma of the breast. Less than 10 per cent. of all cases of cancer of the cervix give a history of any member in the family having had cancer in any part of the body. A clinical record of every case examined by me is kept and filed. It is from these records, extending over a period of twenty-five years, that these deductions are made.

The early symptoms of cancer of the cervix, which I have observed in the order of their importance, are: (1) a watery discharge; (2) an irritable bladder; (3) a little irregular bleeding, and (4) a disagreeable odor. In reference to the watery discharge, I do not mean the ordinary leukorrheal discharge that women frequently complain of, but a watery discharge not unlike beef brine in its appearance. It may not be very profuse, but enough to stain the linen brownish. It irritates the vulva. It is more or less constant for a varying period of from five or six weeks to three or four months, before the patient considers herself ill. This is a most important symptom. If the history of the patient is carefully taken at the time, most of these patients soon after the watery discharge is noticed will give a history of irritable bladder; that is, they say that they must empty the bladder more frequently than before. They are relieved after the bladder is empty and they have little or no tenesmus. Where the patient could formerly go from four to six hours without discomfort, she now has to empty the bladder every two or three hours, and when she is unable to do this she is in distress. This is a most valuable early symptom and should be carefully considered. There is also associated with the watery discharge a vulvar pruritus in a large number of cases. Pruritus not associated with glycosuria during the cancer period of life should be carefully and immediately investigated to determine the exact cause.

The irregular bleeding amounting merely to a spot on the clothing between the periods is not an early sign of the disease, but it is one that should be immediately investigated. If the history of the case were taken at the time that the first bleeding is observed, there would be no difficulty in establishing the diagnosis of cancer, and that it has existed for a period of three or four months, or even longer. In almost every case it would be found that the symptoms enumerated had been present and observed by the patient for many weeks, in some instances for months, before the first bleeding occurred. Bleeding is not an early symptom. Many writers insist that one of the early symptoms of cancer of the cervix is irregular bleeding. It may be an early prominent symptom in some cases, but almost all these patients have other well-marked symptoms before the first bleeding is observed. The difficulty is to get the profession to place the proper importance on the apparently trivial symptoms. The disagreeable odor so much spoken of by most writers is a late symptom of the disease. This odor is from decomposition, a breaking down of the tissues. Necrosis must occur before there is the disagreeable odor for which so many doctors wait before they venture the opinion that the case is one of cancer.

Hemorrhage and pain come late in the disease. When the patient complains of severe pain and has had several hemorrhages, it will be found that she has passed the time when an operation for extirpation of the uterus would be of much permanent benefit.

One must differentiate cancer of the cervix early in its history from (1) erosion, (2) laceration, when the cervix is inflamed, (3) cystic degeneration, (4) tuberculous ulcer and (5) chancre. The diagnosis early is much easier than is generally supposed. When cancer is suspected from the history of the case, a careful vaginal examination is made by touch. If malignant disease is present, a small nodule is to be found. It is usually in the angle of a previous laceration and it can be distinctly felt as a little lump under the examining finger, entirely different to the touch from any other portion of the cervix.

In erosion, the entire cervix in every place feels exactly the same under the examining finger. Every portion of the cervix feels alike in a lacerated, inflamed cervix. There is no hard point the size of a bean or larger, and the entire ulcerated cervix feels alike. With a speculum the cancer appears different on inspection from the other tissues around. It bleeds more easily when touched with a probe. In erosion the whole cervix bleeds easily on touch and there is no hard point. In laceration every portion is alike. In cystic degeneration, under the examining finger one feels hard, round, small tumors, seldom one, usually several. On viewing the parts through a speculum, one finds that the cervix has the same appearance over the entire portion. There is no redness over these little hard bodies. When one is punctured by the knife, with the discharge of mucus the diagnosis is complete. It is hardly necessary to say that the examination would not be complete in any doubtful case without a microscopic examination of a portion of the diseased tissue.

Tuberculous ulcer is so rare, as compared with cancer, that the presumption would be in favor of cancer. The one case which I observed occurred in a patient who was far advanced in general tuberculosis. In that case there was no difficulty in deciding that the case was not one of cancer of the cervix.

From chancre, which is also comparatively rare, there should not be much difficulty in making a correct diagnosis. The sensation by touch is different from every other condition. The deep-seated ulceration, the hardened edge, with sharp, well-defined border, and the signs of syphilis in other parts of the body, should make the differential diagnosis in most cases exceedingly easy.

The early diagnosis of malignant disease of the body of the uterus is also very much neglected by the profession at large. Most cases are permitted to drift under palliative measures for a year, before cancer is seriously considered by the physician. The disease is so insidious in its onset, that if the first symptoms are observed within a year or two after the cessation of menstruation, the patient naturally attributes her symptoms to the menopause, and usually delays consulting her physician until the disease is far advanced. This form of cancer may and does occur in the maiden as well as in the woman who has borne children, which is not true in cancer of the cervix.

The disease is comparatively rare before the menopause. The majority of the patients whom I have seen were past 50 years of age. The earliest symptoms observed in these patients, by careful tabulation and review of their clinical histories, have been a watery discharge with a little bleeding (not a hemorrhage), at irregular periods, coming on several years after the establishment of the menopause. Associated with this discharge, every one of these patients complained of pruritus. Nearly every patient applied to her physician for relief from that annoying symptom, not suspecting that the discharge had any relation whatever to the pruritus. The discharge was not great enough to alarm the patient but enough to leave spots on the linen. As the disease progressed and after it had existed for from six months to a year, the bleeding, which heretofore had been just a spot on rare occasions, became more frequent and a little more in quantity, associated with a discomfort almost amounting to a pain in the back, or pain in the region of the uterus, or both. The pain comes late in the disease when the uterus is enlarged by the new growth, and the uterine muscle makes an effort to rid itself of the foreign body.

The diagnosis of malignant disease of the body of the uterus early in its history is not at all difficult, and there is no excuse whatever for this unseemly delay. With the clinical history, the physician should proceed to the examination. He will find that the uterus is enlarged, freely movable, and more sensitive than normal, with no perceptible disease of the cervix. If the disease is far advanced, the uterus may be greatly enlarged. A probe passed gently into it shows that the organ measures 3 inches or more in depth. The slightest manipulation of the probe will cause a free discharge of bright red blood. If a positive diagnosis cannot be made at this examination, it is the physician's duty to give the patient an anesthetic and explore the uterus thoroughly. He should curet it thoroughly and have a careful microscopic examination made of the scrapings. If this procedure is done, a diagnosis in a majority of cases would be made at the first curetting. If, however, a positive diagnosis of cancer cannot be made and the patient continues to bleed, in the course of six or eight weeks she should again be anesthetized and the uterus thoroughly explored and curetted, and a microscopic examination of the specimen made. Only on a few occasions have I been compelled to do a second curetting to confirm or disprove the diagnosis of cancer, when the clinical history and the symptoms justified that suspicion.

THEORETICAL AND PRACTICAL FOUNDATIONS OF A RADICAL OPERATION FOR CARCINOMA OF THE CERVIX UTERI *

EMIL RIES, M.D.

CHICAGO

The cause of carcinoma is at present unknown. Our knowledge of carcinoma in the human being is built up on clinical and pathologic observations. These have led to certain conclusions as to the growth of carcinoma, which may be summed up approximately as follows:

Carcinoma in its beginning is a purely local disease of a circumscribed group of epithelial cells. The tumor invades the host in two ways: first, by contiguity, and second, by the establishment of colonies or metastases, which are endowed with the same activities as the primary tumor.

The contiguous growth invades lymph-channels early and regularly, the blood circulation rather incidentally, irregularly and, we may say, less frequently. The primary tumor is subject to changes in two ways: first, degeneration, and second, infection. The metastases established especially along the lymphatic system are subject to the same changes, necrosis taking place in them and infection reaching them through the same or similar channels through which originally the carcinoma has reached them.

In the beginning, when there is no carcinoma in the patient's body except the original focus, a piece of tissue which comprises all of this tumor is a simple block of tissue by the removal of which, theoretically at least, the entire carcinoma can be eliminated. As soon as colonies have become established, a block of tissue which is to include the entire carcinoma must include besides the original tumor all the metastases or colonies. In order to excise such a block, we ought to have full and com-

* Read in the Section on Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association, at the Sixty-Fourth Annual Session, held at Minneapolis, June, 1913.