

Lectures.

CLINICAL LECTURE AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.¹

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A CASE OF UTERINE CANCER, WITH REMARKS UPON TREATMENT.

GENTLEMEN, — Mrs. X. presents herself before you complaining of “whites,” frequent hæmorrhages, and failing health; and gives the following history: She is about thirty-five years of age, married, and has had two children, the younger being a little over eight months old. She has not had any miscarriages, and has been in good health until after the birth of this infant she speaks of. No especial difficulty was experienced in her delivery, and she had a good getting up. Her child is not with her, but she says that it is well nourished and as large as it should be for its age; she is still nursing it. She had not been subject to leucorrhœa, except occasionally after her menstrual periods, until about ten weeks ago, when she noticed a vaginal discharge which was of a watery character, and so copious that for a time she thought her urine was dribbling away. About two months ago she had quite a profuse uterine hæmorrhage, which appeared after sexual intercourse. It has been nearly constant ever since, sometimes, indeed, amounting to a flooding, so that she has lost a large quantity of blood. This partially accounts for her sallow and anæmic appearance, but not wholly. She has noticed for the last four weeks that the blood is clotted, and that, mingled with the discharge, are small pieces of flesh. With all this she has not suffered from any pain, yet her general health has failed, and she feels weak; this debility, however, she attributes to the nursing, for she does not feel as well now as she did when the child was born. She appears emaciated, and her skin is leaden and lacks the hue of health. She has, indeed, the appearance of one laboring under some cachexia. Putting our queries further in the direction of her family history, we learn that her father is still living and is unusually vigorous; but that her mother had a malignant tumor removed from her eye, and subsequently perished with secondary tumors in the abdomen. The patient has several sisters, but none are similarly affected.

The history of the patient's disorder, the characteristic local discharges, and the profound systemic disturbance clearly point to malignant disease of the cervix uteri, which inspection only too fully confirms. She is aware of the nature of her affection, and has traveled for some distance in order to get my advice, and to obtain relief by operation, if I think it needful or expedient. A rest of several days in the hospital will be required previous to any interference, and in the mean time I shall decide upon what course to pursue.

For the purpose of convenience of inspection the patient has been placed in Sims's position, and, as I expose the parts with the duck-bill speculum, you can see the large fungous mass of exuberant vegetations springing from the cervix and filling up the whole upper portion of the vagina. This is the source of the copious watery discharge containing granulations; and

from this mass comes the hæmorrhage, which she tells us was first excited by sexual congress. I will now dismiss the patient to the ward, while I make a few observations upon her disorder from a clinical point of view.

The only difficulty that could arise in the diagnosis of epithelioma of the cervix uteri would be in its earliest stage. The frequent hæmorrhages, alternating with a strong-smelling, colorless vaginal discharge, containing pale vegetations looking like small fragments of macerated flesh, occurring in a woman of about forty years of age, or older, are suspicious symptoms. But the crater-like ulcer having a sharp edge and a dense, rough surface covered with granulations, which are easily broken off and easily bleed, and the form in which a friable fungous growth fills the cervical canal and projects from it into the vagina, equally disclose by digital examination the malignant character of the disease. The speculum even is liable to break off these exuberant granulations, and, indeed, sometimes causes troublesome hæmorrhage. Should the cervix feel like fibro-cartilage, and the os remain firm even after the introduction of a sponge-tent, we then have to deal with another form of cancer, more slow in its progress but not the less malignant; for it is generally held that epithelioma, especially the vegetating variety, is the least malignant of all the forms of uterine cancer, and the most amenable to treatment.

The distinction between the several forms of malignant invasion of the cervix possesses much pathological interest, but is far less important from our standpoint than the location and extent of involvement. Having determined their malignant character in general, the next step is to attempt to determine the extent of the disease, in order to decide the questions of treatment and prognosis.

However early the affection may be recognized, it is never too early to get rid of the diseased structure, always going beyond the limits of invasion in order to insure its entire removal. This may be accomplished by the *écraseur*, by the galvano-caustic loop, or by careful and thorough scraping with Simon's curette, and the scissors, or Reamy's gouge forceps. With these instruments the diseased structure is patiently scraped and cut away until healthy tissue is reached. The operation, however, is not completed until the excavation resulting is thoroughly cauterized with the actual cautery or by fuming nitric acid. This latter application need not be made until a few days later, when the sponge tampon introduced after the operation is removed. Since most of you have repeatedly seen me perform this operation, and since I shall soon operate on this woman before you, I shall not go into further details. The subsequent treatment by the mouth is the administration of arsenic, iron, and ergot. Abstinence from sexual intercourse should also be strictly enjoined, for it is liable to cause alarming hæmorrhages from the impact of the male organ on the ulcerated sore. At the first sign of a return of the disease medical advice should be again obtained. Should the disease prove to be so extensive as to forbid any attempt at another operation, much may still be accomplished for the relief of the patient by palliation. The constantly recurring hæmorrhages require ice-water injections or suppositories containing astringents, which can be employed by the patient herself. If these prove insufficient, a tampon of cotton-wool dusted with alum or tannin, or with dilute Monsel's solution, will be re-

¹ Lecture delivered, June, 1880.

quired; but it should not remain in position longer than about three hours, otherwise it may adhere to the friable vegetations and pull them away, causing fresh bleeding. The insufferable stench from some of these cases may be measurably made less overpowering by frequent vaginal injections of a dilute solution of potassium permanganate or of chloral hydrate. The latter I generally use, as I believe it possesses local anæsthetic in addition to its detergent and disinfectant qualities. The last resource of medical art, euthanasia by opiates, is all that can be offered to advanced cases, and when the sufferings are very severe it is a boon to be gratefully accepted and welcomed by the sufferer.

Total extirpation of the uterus by means of laparotomy is a desperate remedy which offers a chance of relief, but is only justifiable where the disease is strictly limited to a movable womb. This procedure has been recommended by Freund, and has been performed some twenty-eight times, with but nine immediate recoveries. Most of the latter cases subsequently perished from a recurrence of the disease. The prospect, you see, is not encouraging, but in such a fatal disease anything offering a ray of hope is eagerly embraced by the patient.

It is worthy of remark that malignant disease of the cervix occurs most frequently in women who have borne children, and, in my experience, in those who have met with a laceration of the cervix. These facts favor the view of its primary local character. But in addition we have the fact that its subjects are generally women in good health, who are ruddy and well nourished, until the cancer ulcerates. Then by absorption of the products of the disease they lose flesh and become leaden in complexion through a systemic infection sometimes termed the cancerous cachexia, but which in reality, it appears to me, is due more to septicæmia than to any specific impression by the malignant disease; for when the ulcerated surface is removed by an operation, their complexions invariably clear up and they gain flesh.

THE ÆTIOLOGY OF PERINEAL LACERATION, AND THE OPERATION FOR ITS RELIEF, WITH A CASE.

The next case is one for operation. Mrs. Y., twenty-five years of age, was confined three months ago, and was so unfortunate as to have an instrumental delivery, which left her in the miserable condition in which you see her. The perinæum was torn completely through into the rectum, the laceration extending for at least an inch up the bowel. As I separate the labia and buttocks you see this large cloaca; the perinæum has wholly disappeared, and the vagina and rectum end in one common opening. The effects of such a rupture as this place a woman in a very unhappy condition. In the first place, it is evident that the sexual functions are seriously impaired. Furthermore, the loss of control of the lower portion of the bowel, owing to the laceration of the sphincter ani, allows the involuntary escape of flatus, and also of the contents of the bowel, which, if at all liquid, soil the patient's person and clothing, and make her an object of loathing to herself. Need I add that the loss of support to the pelvic organs eventuates in prolapse of the uterus and its attendant ill health, so that unless some relief is afforded the afflicted patient is apt to sink into chronic invalidism. Shunned by acquaintances, repulsive to her husband, disgusting to herself, can any state be more abject and pitiable for a young

wife and mother to be in? Since the consequences are such, let me say a word or two upon the subject of the prevention of laceration of the perinæum. How can we prevent the perinæum from tearing? In the first place, inasmuch as a certain amount of time is required for the perinæum to soften (as it does to a marked degree during the descent of the head), we should endeavor to prevent the head from descending too rapidly. It is a hobby with me *not to support the perinæum*, as is generally recommended to be done. For many years I have practiced this plan, and have not paid any attention directly to the perinæum for the purpose of saving it. When the perinæum is very rigid it may be relaxed, as I have frequently succeeded in doing, by passing two fingers into the rectum as the head presses upon the perinæum, and making traction forwards, while with the thumb of the same hand I retard the descent of the head. This procedure brings the perinæum forwards without injurious counter-pressure, and favors the general diffusion of the strain throughout its entire extent, thus relieving the tension in the median line at the posterior commissure. The same manipulation makes the occiput hug the pubes, and favors the final extension of the child's head necessary for delivery. Other advantages, such as the fact that the procedure is not liable to be interrupted by involuntary movements of the patient, and the freedom of action allowed to the perinæum, are also worthy of consideration.

Where the laceration extends through into the rectum you will generally find that there has been a forceps delivery. This so frequently follows the use of forceps, especially in a primipara, that I lay down the rule of practice that, in general (and always with primiparæ), the forceps should be taken off as soon as the head rests upon the perinæum, unless some very positive reasons exist why the delivery should not at this stage be allowed to be completed by the maternal expulsive efforts. When laceration appears inevitable you may invite a "laceration of election" at the sides of the fourchette by an incision through the thin mucous membrane with the bistoury. Two such incisions, one upon each side, will often prevent, and they of course are much more amenable to treatment than, the ordinary perineal rupture.

After the labor is over you should examine the perinæum in every case of confinement that you are called to attend. Do not give remedies for a post-partum hæmorrhage that comes from the lips of a recent perineal wound,—for the transverse perineal artery may bleed freely,—but examine digitally, and if doubt exists inspect the parts. There is no question that small lacerations will often unite of their own accord, yet it is always best not to depend upon nature, but promptly to stitch the edges in apposition. There is also less danger of septicæmia if these stitches are introduced at once, and the raw surfaces saved from being bathed by the putrid lochial discharges. I advise you, therefore, as soon as the placenta is delivered, to close any existing laceration by several points of the wire suture. This is termed the primary operation, and for small or ordinary ruptures is very efficient, but for complete laceration it is not so successful an operation as the secondary one, performed after the expiration of several weeks or months. The fibrous or tendinous point where the sphincter ani joins the sphincter vaginae, and into which the transversus perinei muscles are inserted, is called the central body of the perinæum, and

upon its integrity depends the support of the pelvic organs, since these muscles, with the levator ani, guard the inferior outlet of the pelvis. A laceration involving the perineal body, then, would naturally be followed by a gradual and progressive descent of the uterus under the pressure of the abdominal viscera, until, in protracted cases, the uterus may present the condition of procidentia and remain permanently outside of the body, looking not unlike a horse's penis. This condition is generally complicated by cystocele and rectocele.

The object of treatment in such cases is to restore by a plastic operation the perineal structure and posterior wall of the vagina, which form the principal supports for the uterus. In the primary operation this may be readily performed as follows: as soon as the placenta is delivered, and while the perinæum is still benumbed by the pressure and strain to which it has been subjected, three or more stitches of well-annealed iron or silver wire are introduced through the edges of the gaping wound. The ends are then twisted, or clamped by a shot, although the latter method is less needed in the primary than in the secondary operation, because the parts are more relaxed and there will be less tension. About an inch from the margin of the wound is the line where the stitches should enter and emerge, each one, excepting the lowest, being also made to include the mucous membrane of the vagina near the edge of the laceration. The lowest stitch is entered below the lower angle of the wound, and is completely buried in the recto-vaginal septum. An anæsthetic is not often needed for the primary operation, since the parts are numb and insensible from the recent passage of the head. The urine must be systematically drawn with a catheter, while the bowels are kept bound by opium, until the sixth or seventh day. The bowels may be opened by a saline on the day after the stitches are removed, after which the use of mild laxative enemata may be of service in preventing any undue strain upon the recent cicatrix. If, upon removing the stitches, there is not primary union, we may still obtain much advantage by encouraging granulation. Indeed, it is not uncommon to find small or superficial lacerations filling up completely by granulation, without any aid from sutures. In all cases of laceration of the perinæum it is incumbent upon the physician, in the light of our present knowledge of the causes of puerperal septicæmia, to employ frequent antiseptic and detergent vaginal injections, in order to prevent, as far as possible, the recent wound from being inoculated by the putrescent lochia.

The secondary operation may be performed at any time after complete involution of the parts has taken place, but it should not be too long delayed, on account of the train of evils that I have already referred to. It is better for the patient, however, to be in good physical condition, and for this reason I would prefer waiting until the period of nursing is over.

Our patient appears to be in excellent general health, and as she is not nursing I shall proceed at once to the operation. Yesterday her bowels were freely moved by oil, and this morning she has taken one grain of opium; this is done in order that the rectum shall be empty, and also because we shall require the bowels to be absolutely confined for the next week or ten days. She has taken a light breakfast, and will be kept upon a spoon-diet during her treatment.

The instruments I am in the habit of using are an

ordinary medium-sized scalpel, a pair of scissors slightly curved on the flat, a pair of forceps long-handled and rat-toothed, some perforated shot and a shot compressor, a blunt-edged perinæum needle, eyed at the point, silver wire, *serres-fines*, an ordinary suture needle and needle holder, and, finally, a self-retaining catheter, such as the Skene-Goodman, from which a small rubber tube may be carried to the urinal under the bed.

Having fully etherized our patient, she is placed in the "lithotomy" position, and the lower limbs, in a state of acute flexion, are supported by two assistants, while a third attends to the ether. It is also well to have a fourth assistant to sponge the wound, etc. The edges of the wound are now freshened by clipping off the cicatricial surfaces with the curved scissors, commencing at its inferior angle. Partly by snipping with the scissors and partly by dissecting with the knife a large raw surface is gained, somewhat resembling a red butterfly in its outline. From this surface there is free oozing of blood until the stitches are introduced as before described, and traction is made so as to bring the edges in apposition. The *serres-fines* are very useful during the dissection in checking any small vessel which bleeds too freely. After accurate coaptation of the wound you see how well the perinæum is restored. In a large proportion of cases this operation is perfectly successful, and the functions of the parts are wholly restored.

Great care is demanded during the after-treatment. A self-retaining catheter, however, may be dispensed with, provided the urine can be drawn regularly twice or three times a day by an experienced nurse, for it should not be allowed to dribble over the wound. The patient's diet is restricted to milk, eggs, toast, and animal broths, so as to prevent clogging up the rectum. On the seventh or eighth day I remove the sutures, with the exception of the lowest one, which may not be disturbed until the bowels have been relieved by an enema of four ounces of olive oil. This may be supplemented by a dose of castor oil, and if needed followed by a second clyster of soap and warm water. Afterwards, compound licorice powder may be given at night, or a teaspoonful of Rochelle salt in a large tumbler of water, taken early in the morning, in order to prevent constipation. The lowest suture may be removed on the tenth day. Sometimes, however, I remove all the stitches before opening the bowels.

In conclusion, let me impress upon you the truth that laceration of the perinæum is very largely due to precipitation in the second stage of labor, and more particularly to the hasty delivery by forceps. The practical deductions from this are to retard the head until the perinæum softens, to aid in extension as the head descends along Carus's curve, and lastly, as a rule, to take off the forceps when the head reaches the perinæum, so as to allow the final delivery to be completed by nature. This is safe practice, and as such I warmly recommend it to you.

— Says the *Louisville Medical Journal*: "Hirschsprung thinks that a demonstrable swelling beneath the border of the rib, especially upon the right side, of the consistence and shape of the kidney, which can easily be pushed upward toward the normal position of the kidney, and is freely movable forward and backward between the hands, cannot be mistaken for anything else."