

PLATE XXXIV.

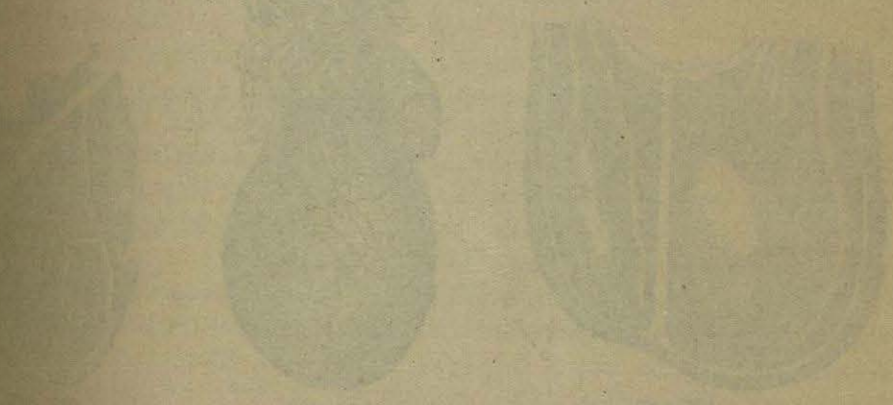
POSITION OF THE ORGANS IN THE MALE PELVIS.

24, is the bladder; 23, the rectum; 14, the kidney; 16, the large artery, which forks, one part going to each leg; 21, the branch going to the left leg, and 22 to the right. The tube crossing 22 is the ureter, or tube conveying the urine from the right kidney to the bladder; 27, 28, are the right and left abdominal rings, filled with the spermatic vessels, arteries, veins, and nerves. These are the places where ruptures occur. 18, is the large vein, under the artery, and corresponding to it; 15, the navel; 25, the pubic bone.

In the chest, 1, the large aorta; 3, 3, the right and left sub-clavian veins; 11, the descending aorta; 12, the œsophagus leading to the stomach.

PART XIV.

SPECIAL DISEASES OF THE GENERATIVE ORGANS. MALE AND FEMALE.



collected in the substance of the testis; and it is...
the spermatic cord.
This is usually connected with a general disease of the...
of the other testis. It is however not always...
them. In some cases it has been found on...
true, or even by light. It is more frequently...
corresponds to some other disease, particularly...
of the spermatic cord.

CHAPTER XLVI.

DISEASES, MALFORMATIONS, AND DERANGEMENTS OF THE MALE SYSTEM.

It is of the greatest importance that every man should know sufficient of himself to be able to detect the various derangements of his system at the earliest possible moment, and that he should also know the proper steps to take for their prevention and removal. He who knows nothing of this kind, and goes to a physician only when he feels pain or inconvenience, will often find that he then cannot be benefited, the favorable moment having gone by unknown to him, through his ignorance. Some of the most severe and dangerous diseases of the testes, for instance, cause neither pain nor inconvenience till they are considerably advanced. I shall therefore give all the indications that can be relied upon, of each disease, and also the treatment to be pursued, making it in every case, as far as possible, such as may be practiced by the person himself.

HYDROCELE, OR DROPSY OF THE TESTICLE.

This is sometimes called a *swelled* or *watery* testicle. Properly speaking, this is but seldom an affection of the testicles themselves, but of the scrotum in which they are contained. There are three kinds of hydrocele: first, that in which the fluid

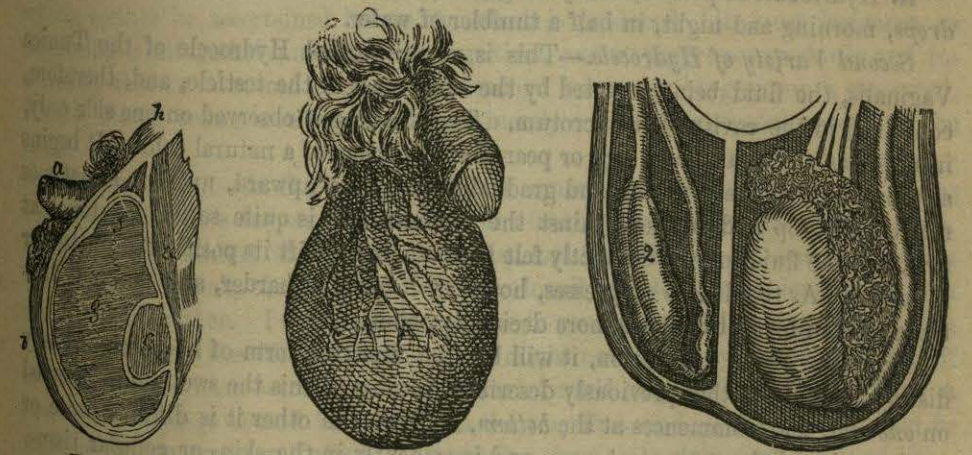


FIG. 119.

FIG. 120.

FIG. 121.

A case of Hydrocele laid open.

FIGURE 119.—a. The Penis much contracted. b. The Scrotum. c. The Testicle. f. The Tunica Vaginalis, which, it will be seen, is double, from being reflected over the Testicle, which is on the outside of it. g. Is the water, which is between the two folds of the Tunic. h. The Spermatic Cord.

FIGURE 120.—External appearance of the Hydrocele, showing the veins also in a case of Varicocele.

FIGURE 121.—Wasted Testicle. 1. Shows the left Testicle perfect. 2. Shows the right Testicle wasted away, as it often does from masturbation, and sometimes from hydrocele.

collects in the substance or tissue of the scrotum; secondly, that in which it is secreted by one of the coats of the scrotum; and thirdly, that in which it collects in the spermatic cord.

First Variety of Hydrocele.—This is scientifically called *Hydrocele Edematodes*, and it is usually connected with general dropsy, or arises from the treatment of some of the other varieties. It is, however, but seldom met with, and rarely arises of itself. In some cases it has been brought on by wearing an improperly-constructed truss, by blows, or even by tight clothing, but much more frequently it is only a consequence of some other disease, particularly dropsy of the abdomen, which is likely to extend to the scrotum. In this form of disease the testicle is usually softish at first, and when pressed the mark of the finger remains of a white color for some time after. As it progresses, however, the scrotum becomes harder, and perfectly smooth, the penis enlarges, particularly at the prepuce, and in very bad cases the skin inflames and sloughs away.

The treatment of this form of hydrocele must vary somewhat according to the conditions under which we find it. If it results from general dropsy, it can be cured only by the removal of that, and will require but little local treatment. If there be any injurious pressure, it must be immediately taken away, and frequently the doing so will effect an immediate improvement without anything further being done.

The local treatment, after attending to the above directions, must consist of frequent bathing with cold alum water, one ounce to a pint, or of simple cold water. A suspensory bandage must also be worn constantly, except when the patient can remain perfectly still, without standing too long. The bowels must be kept free, and but little fluid drunk. The following mixture may be taken for four days, and then omitted four days, and so on alternately till it has been taken *twelve* days in all, unless the swelling is obviously going down after the first four days, which it will often do, in which case it need not be continued.

R. Hydriodate of potassa, thirty-six grains; distilled water, one ounce. Dose, *ten drops*, morning and night, in half a tumbler of water.

Second Variety of Hydrocele.—This is usually called Hydrocele of the Tunica Vaginalis, the fluid being secreted by the inner coat of the testicle, and, therefore, contained in the cavity of the scrotum. The swelling is observed on one side only, in most cases, like a smooth egg or pear-shaped tumor, of a natural color. It begins at the bottom of the scrotum, and gradually progresses upward, until it sometimes reaches the top and presses against the abdomen. It is quite soft to the touch at first, and the fluid may be distinctly felt to fluctuate or shift its position as the tumor is moved. As the disease progresses, however, it becomes harder, and does not fluctuate, and in form it becomes more decidedly oblong.

From the above description, it will be seen that this form of hydrocele is easily distinguished from that previously described, because in this the swelling is observed on *one side*, and commences at the *bottom*, while in the other it is diffused more or less over the whole scrotum at once, and is evidently in the skin, or cellular tissue. Sometimes, it is true, *both* halves of the scrotum may begin to fill up with fluid, but even then each one is sufficiently distinct from the other for both to be distinguished, and for the nature of the affection to be readily seen.

A very good way to examine a hydrocele is to place a candle behind it and look in front, when it will usually appear semi-transparent, and sometimes so perfectly so that the testicle may be distinctly seen in the middle of the water, like the yolk of an

egg in the midst of the white. When the testicle cannot be seen in this way, it is often difficult to find it, and its position can only be ascertained by a hardish feeling in the back part of the swelling near the top.

The quantity of fluid secreted in some of these cases is very great, as much as *six quarts* having been removed by Mr. Cline from *Gibbon*, the great historian. There may, however, be but a small portion, and it may remain for many years, or even during a person's life, without increasing, though the probability is against this, and in some cases it increases very rapidly.

It is singular, also, that even in some very bad cases there is but little distress, and, except from the inconvenience of its weight and size, many patients suffer but small annoyance from it. Sometimes, however, it causes a troublesome sense of uneasiness and pressure in the testes and groin, and occasionally even produces numbness of the limbs. When very large, the penis is drawn into the swelling, so that it appears smaller, and its erection becomes difficult and painful; the spermatic cord is also pulled down, and becomes tender, and the motion of the limbs is much interfered with.

There is not much to be feared from a hydrocele of this kind, if the general health be good, unless it be complicated with a real swelling of the testicle; the case then becomes very difficult, and nothing can be done till the testicle itself is cured. I have known a man of sixty years of age who had a hydrocele from the time he was fourteen; it was of a considerable size, but had never much incommoded him, nor in any way interfered with his health or functions. The difference in the symptoms of a hydrocele and a swelled testicle will be pointed out in the article on *Sarcocele*.

The causes of this form of hydrocele are but little known. It is undoubtedly brought about, in some cases, by injuries, such as blows, pressure upon the saddle in horse-riding, and by badly-made trusses. Too much standing will also dispose to it, particularly in those with a relaxed state of the muscles. In general, however, it results from some constitutional tendency, the nature of which is unknown, and which cannot be ascertained before the effect is produced. In most instances, its beginning is altogether unknown to the patient, and it progresses so slowly and insidiously that an advanced stage may be reached before anything wrong is suspected. I have known young men suppose it was merely a natural increased growth of the parts.

The Treatment.—In the early stages, it is sometimes sufficient to use cold lotions two or three times a day, as prescribed for the first variety, particularly that of alum. Frequent cold bathing, in addition, will assist, and if the bowels be kept free and but little fluid be drunk, the hydrocele will occasionally go down considerably, or even disappear altogether. I would advise any one to continue this simple treatment even if it only arrested the disease, for though it might not positively cure at first, still if it keeps matters from becoming worse, Nature herself may work a cure in time. A suspensory bandage should be worn from the very first, and as much rest should be taken as circumstances will allow. After using the simple alum-wash for some time, if the swelling still continues, the following lotion may be applied instead, night and morning:

R. Powdered Peruvian bark, one ounce; boiling water, one pint. Boil these for ten minutes, and then add, when cold, half a pint of spirits of camphor.

This is perhaps the best lotion that ever was used for this purpose, and has done more good than all others put together. The parts should be bathed with it for

about ten minutes before the suspensory bandage is put on in the morning, and for the same time after it is removed at night.

In some cases, the following wash has been found to succeed, even where the other did not:

R. Sugar of lead, one ounce; laudanum, a teaspoonful; water, one pint.

This is to be used as a lotion, the same as the other, and both must be applied cold.

Very little can be done by internal medication, except to keep the bowels free, though occasionally the following recipe may assist:

R. Vinegar of colchicum; vinegar of squills, and nitric ether, of each *half an ounce*—to be mixed. Of this mixture a teaspoonful may be taken in a drink of water three or four times a day. Frequent bathing, and clothing the body warmly are also beneficial.

When all these means fail, however, as they too often do, some kind of operation must be resorted to, either to give temporary relief, or with a view to cure. It is customary, for the first purpose, to puncture the sac of the scrotum with a sharp instrument, and let out the water. If nothing more be done than simply letting out the fluid, it will usually fill again, though occasionally it does not. To effect a perfect cure, the scrotum is injected through the same wound, after the fluid has all escaped, with some astringent solution. Cold water only is used by some practitioners, but more frequently a mixture of two parts port wine to one of water. Solutions of iodine and of hydriodate of potassa have also been used, and in some cases, the same fluid that was discharged, but the port wine and water appear to act the best of any.

The manner in which this injection appears to effect the cure is this: it excites a considerable degree of inflammation in the testicle, and also in the coats of the tunics, so that they *grow together*, and in this way the cavity in which the water accumulated is entirely obliterated.

In most cases, if properly performed, this operation is quite successful, causes but little pain, and is perfectly free from danger. In some instances, however, it is unsuccessful, owing to the fluid not being well injected, and occasionally there is much more inflammation caused by it than what is desirable, attended by serious constitutional irritation. The puncturing instrument, and the tube to convey the fluid, must be very carefully introduced, so as not to injure the testicle, but they must also be carried sufficiently far to insure all the water being discharged. The proper place to make the puncture is nearly at the bottom of the tumor, behind; the fluid may remain in about five minutes, and about as much must be injected as was drawn out.

Sometimes a difficulty occurs in this way: after the fluid has escaped, the tunica vaginalis draws together, so that the opening into it does not correspond with the opening outside, and if the instrument has become displaced before the injection is thrown in, it is difficult again to introduce it. In fact, it is better if this occurs to leave off till another day, and operate again, for the attempt, if too often made, may cause serious and useless inflammation. There is also danger, if the instrument is put in again, that it may not go into the *cavity*, but merely into the *substance* of the skin, and the fluid is then thrown into the cellular tissue, and not only does no good, but may even remain and produce a real dropsy of the scrotum, or *hydrocele œdematodes*, the same as described under the head of the first variety.

In fact, some surgeons purposely perform the operation in such a way as to

change the hydrocele into a simple dropsy of the scrotum, by letting the fluid into the cellular tissue, by simply introducing a needle. The new disease is certainly more easily cured than the former one, and the pressure of the water on the scrotum often prevents any more being secreted in the tunic, but still in many cases a cure is not effected, and sometimes is made more difficult. I would much rather advise the total discharge and injection.

This operation is very simple and successful in skillful hands, but often fails from want of skill or proper care. If too much inflammation follows, poultices must be applied and other simple means used to subdue it, and the patient must keep still. It must be borne in mind, however, that considerable inflammation is *necessary*, to effect a cure. I once knew a man who operated upon himself with a common pen-knife and a small catheter. He effectually discharged all the water, but knew nothing about injecting anything in return. At the end of two years there was but little accumulated again, and he thought so little of what he had done, that he said he should always repeat the operation himself, as often as might be necessary.

It is sometimes necessary to do this to young children, and it must be remembered that in them the testicle is much *lower* than in adults, and greater care is, therefore, needed not to wound it.

A simple dressing of mild ointment, or even of wet cloths is all that is needed after the injection is withdrawn.

Some practitioners have used *setons*, and others *galvanism*, to cure hydrocele, but though each method has been successful in some cases, yet they are not more so than the injection, which is much more simple, and causes much less pain. Either of these methods may, however, be tried, if that fails.

After the water is drawn off, the testicle should be carefully examined, as it can then be readily felt, because if there be any swelling of it, or any indications of cancer, the injection must not be thrown in till that has been beneficially treated.

In some persons the water will accumulate in spite of all, and it is necessary to discharge it frequently. In infants it will often disappear spontaneously, without any treatment, but it rarely does so in adults, though I have known some in whom brisk exercise alone would disperse it.

Sometimes this form of hydrocele is congenital, or exists from birth. In these cases the fluid descends from the abdomen, the opening between it and the scrotum, by which the testicles descended, not having closed. Many persons have been deceived by this affection, and have taken it for a rupture, but a little careful examination will soon disclose the truth. By gently compressing the tumor, the fluid will rise into the abdomen, through the ring, and return again when the pressure is withdrawn. To a certain extent this trouble is more general than is supposed, and is frequently ascribed to wrong causes. It is advisable to have it attended to as early as possible, because there is danger, if left over the first *month*, of its continuing during the whole of childhood, or perhaps even till adult age, and leading to other derangements.

In the early stages, and sometimes even after it has existed long, it is possible to cure it in a very simple manner. The water must be gently pressed back into the abdomen, and then a truss or bandage of some kind must be worn, so constructed that the pad will press exactly on the ring, and thus prevent the fluid from returning. In a short time the passage grows up, and there is then no further danger. The period required to effect a cure varies much in different cases; thus in some it

will be complete in two or three weeks, while in others it requires as many months, or even much longer. Cold lotions must be used in these cases as with adults.

In case of failure, with these means, which will sometimes happen, the only other remedy is the *injection*, the same as already described. The operation is precisely the same as for an adult, but must be conducted with more care, there being more risk of serious inflammation. It must be recollected also that while the injection is being made the upper part of the scrotum must be held firmly together, just by the ring, to prevent the injected fluid from passing up into the abdomen, which it would otherwise do, and perhaps cause serious trouble. A truss or bandage must be worn for some time after the operation, to prevent any more fluid coming down, and also to retain the bowels in their place.

Third Variety of Hydrocele.—In this form of hydrocele, as already explained, the seat of the watery effusion is not in the scrotum, but in the *spermatic cord*. It may occur in two ways, first in the substance, or cellular tissue of the cord; and secondly, within certain cavities in the sheath or tube itself.

The first form of spermatic hydrocele is very rare, and is but seldom of much account. It is similar in its nature to the first form of hydrocele in the scrotum, or *hydrocele œdematodes*; in fact, it is the same disease only confined to the sheath of the spermatic cord. Its causes are also in all probability the same, and it requires the same treatment. When it results from general dropsy, which is usually the case, no cure can be expected until that is remedied.

The palliative treatment must consist in wearing a bandage and using cold astringent lotions, and it is but seldom that anything more is required. Occasionally, however, the swelling becomes so great as to cause serious inconvenience, and the patient insists upon having relief immediately. Under such circumstances the only mode of proceeding is to open the swelling, and so let the fluid escape. There is, however, some danger in this, and in most cases it is better not to perform the operation. Many persons have mistaken this affection for a small hernia, or a swelled vein.

The other form of spermatic hydrocele is usually termed *encysted hydrocele of the spermatic cord*, because the fluid is contained in one or more sacs. The swelling in this case is in the form of an egg, and situated between the testicle and the groin. It is usually firm to the touch, with no fluctuation, and perfectly distinct from the testicle, which may be felt below it. Sometimes the sac of fluid is near to the ring, and can be pressed up into the abdomen, so that it will disappear, but only to return immediately the pressure is withdrawn. In such cases it may easily be mistaken for a hernia or rupture, unless proper care be taken. On examination, however, it will be found that the vessels of the spermatic cord can be distinctly felt, even when the tumor is down, by merely pressing it on one side, which is not the case in rupture. The functions of the bowels also are not interfered with in hydrocele, while they are very much so in hernia, when it is down.

Occasionally the watery tumor descends much lower than usual, and may then be taken for hydrocele of the tunica vaginalis. It is only requisite, however, to remember that when the fluid is contained in the scrotum it *surrounds the testicle*, which can scarcely be felt through it, but when it is contained in a sac, in the sheath of the cord, it is always either *above* or on *one side* of the testicle, which is quite separate from it.

The treatment should consist at first in fomentations, as directed for the other

varieties, and in keeping the bowels perfectly free. This plan is the best one with children, who are often afflicted in this way. A mixture of two parts alcohol and one of water, is very good to use night and morning, or either of the recipes already given. With regard to internal medicines, they are perhaps less proper in this variety than in either of the others, but if thought necessary there are none better than those before advised.

Sometimes, especially in children, a small puncture may be made and the fluid let out, but in adults this is often of little use, as the sac fills up again. To prevent this the port wine injection must be used, or the sac must be fairly *cut out*. Some practitioners merely lance it open the whole length, and Sir Astley Cooper was accustomed to insert a *seton*, a plan which I have known to succeed frequently, both in children and adults. The particular plan to be pursued must, however, depend upon the circumstances of the case, and I should advise every one to hesitate about submitting to any operation, if they can keep tolerably comfortable, and get *no worse* without it, which they nearly always can if they will persevere with the simple directions given, and wear a suspensory bandage.

In children the following lotion, applied freely two or three times a day, will in most cases cause the water to disperse without any further treatment:

R. Hydrochlorate of ammonia, one ounce; distilled vinegar, four ounces; water, six ounces.

The same lotion, with half the water, will also be excellent for adults.

SARCOCELE, OR CHRONIC FLESHY SWELLING OF THE TESTICLE.

This affection is the real *swelled testicle*, or chronic fleshy enlargement of the substance of that organ.

The causes that lead to this enlargement are various, and some of them not yet understood. Cancer and scrofula are perhaps the two most frequent causes, but it often arises when they do not exist, and when no other immediate agency can be detected. Sometimes a chronic swelling will take place in the testicle, and after existing for a considerable time, entirely disappear without any evil consequences. More frequently, however, the result is more serious, and a malignant tumor is eventually developed, either *cancerous*, *scrofulous*, or *sarcomatous*.

Sarcomatous Tumors are of various kinds, and are the same in the testicle as in other parts of the body. The most frequent kind is that called *medullary*, because it resembles the substance of the brain. It is a most dangerous affection, and unless attended to at the very earliest moment is nearly sure to be fatal. The whole substance of the testicle is converted into a kind of white pulp, similar in appearance to the brain, and in a short time the disease is propagated along the absorbents till it attacks all the neighboring parts. The glands in the groin soon swell to an enormous size, and slough and bleed, and eventually the lower part of the abdomen becomes affected in the same way till the parts are all destroyed and the patient sinks. This is thought by some to be the same disease as *fungus hæmatodes*, and in many respects it closely resembles cancer. There is, however, sufficient difference between them to enable the surgeon to distinguish with ease, but to the patient the distinction is of little consequence, each being equally dangerous, and the treatment being the same for both.

Sometimes the mistake may be made of confounding sarcoma with hydrocele,

unless a strict examination be made. In hydrocele, it must be recollected, the swelling begins *at the bottom*, and gradually extends upward to the abdominal ring, but no farther; it is also semi-transparent, and fluctuating. In sarcoma, on the contrary, the swelling is evidently in the whole substance of the testicle at once, and extends upward into the spermatic cord; it is also not in the least transparent, and is much heavier than water. From want of attention to these points of difference the swelled testicle has often been punctured, *to let out the water*.

Cancer in the Testicle is precisely the same in its origin and progress as in any other part of the body. The testicle becomes the seat of a hard tumor, through which dart deep-seated lancinating pains, which shoot up to the loins, and down the limbs. Eventually this becomes an open sloughing ulcer, which destroys the substance of the organ, and gradually extends to the abdomen, causing a profuse offensive discharge, and a rapid impairing of the general health.

Scrofula of the Testicle.—This disease is scarcely ever met with except in those who plainly exhibit a scrofulous habit of body. It causes a swelling of the testes similar to that of cancer in its feel and appearance, but unaccompanied by any of the lancinating pains. When the tumor is cut into, it seems filled with a whitish or yellow substance like curds or soft cheese, along with a small quantity of pus. The commencement of this affection may be very slow and insidious, and for a long time, even after it has become fully established, nothing serious may be indicated. There is nothing to alarm the patient much till the tumor breaks open and becomes an ulcer, its progress then is often very rapid, and all the neighboring parts speedily become diseased and destroyed.

The causes of that peculiar tendency to scrofula and cancer which many persons exhibit are as yet unknown to us; they are, however, in all probability what is termed *constitutional*, and not produced by any accidental agency after birth, though there may be many causes that will *excite* or call out these diseases, when they would otherwise have remained dormant, either for a longer time or perhaps altogether.

The treatment of the various forms of sarcocele above described may be given in a few words, for unfortunately but little can be done with them.

In some few cases of simple swelling, of the medullary or fatty character, it may perhaps be dispersed, in the *very earliest stages*, by using leeches and cold lotions or mercurial ointment externally, with mercury and iodine internally, but this can seldom be depended upon. Unless such means evidently decrease the swelling *immediately*, no further time should be lost with them, or the chance may go by of doing good by other means. The removal of the testicle, by an operation, offers the only chance of effecting a certain cure, and this is of no use either unless performed *at first*, for if the disease has progressed till the neighboring parts are attacked, the removal of the testicle will not check it. Unfortunately, many patients delay having this necessary operation performed till it is too late, and they then conclude it is in itself of no use. It must be borne in mind that some of these cases are very rapid in their extension, and that the surrounding parts may be deeply affected without giving any sign of it. In cancer, especially, it is necessary to operate as early as possible, for even when the testicle itself shows but slight signs of the disease, it may have extended to the loins and abdomen. There have undoubtedly been many cases of sarcocele, of all the above kinds, that have been entirely cured by removing the testicle, and which have never appeared again.

In general only *one* testicle is diseased, and that only needs removing, though

there is danger of both becoming affected by delay. The operation itself is comparatively simple, and not attended with so much pain or danger as many might suppose it to be.

It is very common, as before remarked, to find sarcocele accompanied by hydrocele, and frequently, on evacuating the water in hydrocele, the testis is found enlarged, though there were previously no signs of it.

It is generally conceded that blows or other violence may produce simple induration or hardness of the testicles, leading to medullary or fatty tumors, but not to cancer or scrofula, though they may excite such diseases to break out. The too frequent irritation of bougies and injections is also suspected of injuring in the same way.

FUNGUS OF THE TESTICLE.

This affection is different from either of those previously described, though it has some resemblance, at certain stages, to cancer. It is fortunately more capable of being beneficially treated, however, and is not so likely to extend to other parts.

It is supposed to be caused by bruises or other violence, or by gonorrhœa and gleet, particularly when injections have been used. The first indication is a simple swelling without pain, which bursts and forms an abscess discharging pus, and from the opening a fungus begins to protrude. This fungus may attain an immense size, if not removed, extending to the abdomen and becoming very virulent. The discharge also may become so profuse as to cause much general debility and constitutional irritation.

In the first stages of the swelling, when it is known to arise from external violence, it may sometimes be reduced by leeches, warm fomentations, and poultices, with purgatives used internally, and even after the abscess has opened fomentations and poultices may be sufficient to prevent any extension of the mischief. When the fungus has appeared, these simple means become useless, and resort must be had either to caustic or the knife to remove it. In my opinion, the caustic is the best remedy, and seldom fails to remove the diseased growth without any injury to other parts. If the disease has not progressed too far, it may often be cured without injuring the testicle at all, though it was formerly thought necessary to castrate in every case, and some practitioners even do so now.

I once knew a man who had one of these fungous growths, arising from a bruise, who was cured by the daily use of powdered burnt alum, dusted over the fungus, and followed by a warm linseed poultice. This was done morning and night, and by these means only, combined with the use of simple purgatives, and the solution of hydriodate of potassa internally, as directed for hydrocele, he fully recovered in about six weeks. The testicle, however, remained hard, and in all probability its power was lost.

In all cases of bruising, or other violence, the timely use of rest, poultices, and warm fomentations, may prevent many of these evils.

There are several other kinds of tumors and swellings of the testicles occasionally met with, besides these mentioned, but they do not differ essentially, either in their nature or treatment, and often it is scarcely possible to distinguish between them. One peculiar form of cancer is frequently met with in England amongst *chimney-sweeps*, and is caused by the irritation of the soot lodged in the furrows of the scrotum. It is met with sometimes, but rarely, on the hand or foot. It is commonly termed the *sweeps' cancer*.

HERNIA HUMORALIS, ORCHITIS, OR INFLAMMATION OF THE TESTICLES.

This sometimes appears to arise from some unknown constitutional cause, and comes on very slowly, but more usually it is from some obvious agency, and assumes from the first an acute form. It arises frequently from blows, falls, hard riding, and strains, but most generally from the use of injections and bougies, in gonorrhoea and stricture, or from the performing of operations like those for hydrocele. I have also known it to follow *intense sexual excitement*, where gratification was impossible and the semen had no tendency to escape involuntarily. In children it very frequently follows or accompanies the *mumps*.

Inflammation of the testicle usually commences with slight pain and soreness in the part, attended by swelling, which is at first soft and yielding, but gradually becomes hard, and sometimes hot and very painful. The scrotum loses all its roughness by swelling so much, becoming smooth and red, and occasionally so tender that it can scarcely be touched. As the inflammation progresses, the swelling extends up the spermatic cord, and severe pain may be felt in the loins, and sometimes even in the limbs, till the patient suffers the most excruciating agony.

In many, even of the most severe cases, but little pain is experienced, and the inflammation will subside, under proper treatment, leaving no evil effects whatever behind. There is danger, however, of its being followed by abscess, or hydrocele, if neglected, even if it does not excite tumor or fungus. A loss of sexual power is also apt to follow inflammation of the testicle, either from its deranging the structure of the organ, or from its obliterating the passage in the vas deferens, and thus preventing ever after the passage of the semen from the testicles to the urethra.

Orchitis arises much oftener from gonorrhoea than any other cause, the inflammation extending from the urethra, along the vas deferens, till it reaches the epididymis, and finally the testicle. The epididymis is always first attacked in these cases, and very frequently the disease extends no further, when it is called *epididymitis*. If it reaches the testicle, it is then called *hernia humoralis*.

When the inflammation accompanies gonorrhoea, it will generally be found to arise whenever the discharge is *suddenly checked*, and immediately the discharge is allowed to return the inflammation ceases. This shows the close sympathy there is between the urethra and the testes, and what danger there is in irritating the urethra in any way. I have known inflammation of the testes arise in *one hour* after using a strong injection.

The treatment of this severe affliction must consist, in the first place, in perfect rest on the back, the scrotum being supported by a suspensory bandage or truss. Cold lotions must be freely and frequently used, and the bowels opened regularly with salts or castor oil. No stimulating food or drink must be taken, and the mind must not be agitated, nor the feelings excited in any way. The best lotion is a mixture of half a pint of water to half a pint of alcohol, with a large spoonful of laudanum added. If the pain be very severe, this lotion may be made hot, or a hot linseed or bread poultice may be applied. A hot bath is also frequently of service.

A perseverance in these means will usually reduce the inflammation and pain in one or two days, unless the exciting cause continues to operate. In very severe cases, however, particularly those from bruises, it may be necessary to apply leeches, or to open some of the veins of the scrotum, which nearly always gives relief if the blood flows freely. If the pain be so bad that the patient cannot rest, he may take twenty

or thirty drops of laudanum at bed-time, in a little flax-seed tea or barley-water, or in simple water alone if these are not to be obtained conveniently. The following pills are the best for this purpose, however, when they do not disagree with the stomach, which unfortunately they are apt to do, but they may be tried:

R. Opium, with soap, twenty grains; camphor, half a drachm; to be made up into *twelve pills*, with as much simple mucilage as may be requisite. One of these may be taken every six hours if required.

The following ointment, applied externally, may also give great relief from pain when the lotion fails to do so:

R. Belladonna ointment, two ounces; camphor, one drachm; paregoric elixir, one drachm.

This must be mixed into an ointment, and a portion rubbed carefully over the tender parts as often as the pain becomes severe.

When the inflammation has been fully subdued, there is danger of the testicle being left permanently hardened, or indurated, which is nearly sure to destroy its power, if it does not originate other diseases. To prevent this, if the slightest hardness remains, it must be frequently bathed with hot water and poulticed, or if these fail, it must be rubbed with the *camphorated mercurial ointment*. Galvanism has been used with success when the hardness resisted all other means, and as it is a safe remedy it may be always tried. The only internal medicine likely to be of use is the solution of hydriodate of potassa, before directed, and even this should be but seldom taken. The regular use of the camphorated mercurial ointment, followed by hot fomentations, is the most generally successful treatment.

The best remedy in some cases of acute orchitis, particularly when arising from the sudden stoppage of a gonorrhoeal discharge, is *compression*. This is effected by means of strips of sticking-plaster, which are stuck firmly around the organ, and also passed underneath, the pieces being about a quarter of an inch wide, and long enough to go round and meet. These of course cross each other, and when drawn pretty tight, and made to adhere fast, they press considerably, and draw the whole organ together. The parts require to be shaved to apply them, and they must be reapplied as often as they work loose, or as fast as the swelling shrinks. In most cases, the patient experiences great and immediate relief from this application, owing to the support it gives; it must always be used, however, *with* the suspensory bandage.

Compression is, in general, only appropriate in cases of acute orchitis arising from gonorrhoea, though it may be advantageously resorted to, in some few instances, when it originates from other causes. I have used it when the swelling arose from intense sexual excitement, and also in one or two instances from blows, and with advantage; but generally the treatment before given will obviate the necessity for compression if it be persevered in. Latterly, the compression has been effected by means of *collodion*, a substance made by dissolving gun-cotton in ether, which sticks much more forcibly, and is applied more readily.

The symptoms of epididymitis are the same, and so is the treatment, as when the whole organ is attacked, which it is nearly sure to be eventually if the epididymitis continues.

There is always reason to fear that a severe attack of orchitis will permanently injure the testicle, more or less, by obliterating some of the seminal tubes, even if it does not close the vas deferens, or harden the epididymis. One testicle, may, however, be inflamed, and suffer, while the other remains perfectly sound. After having