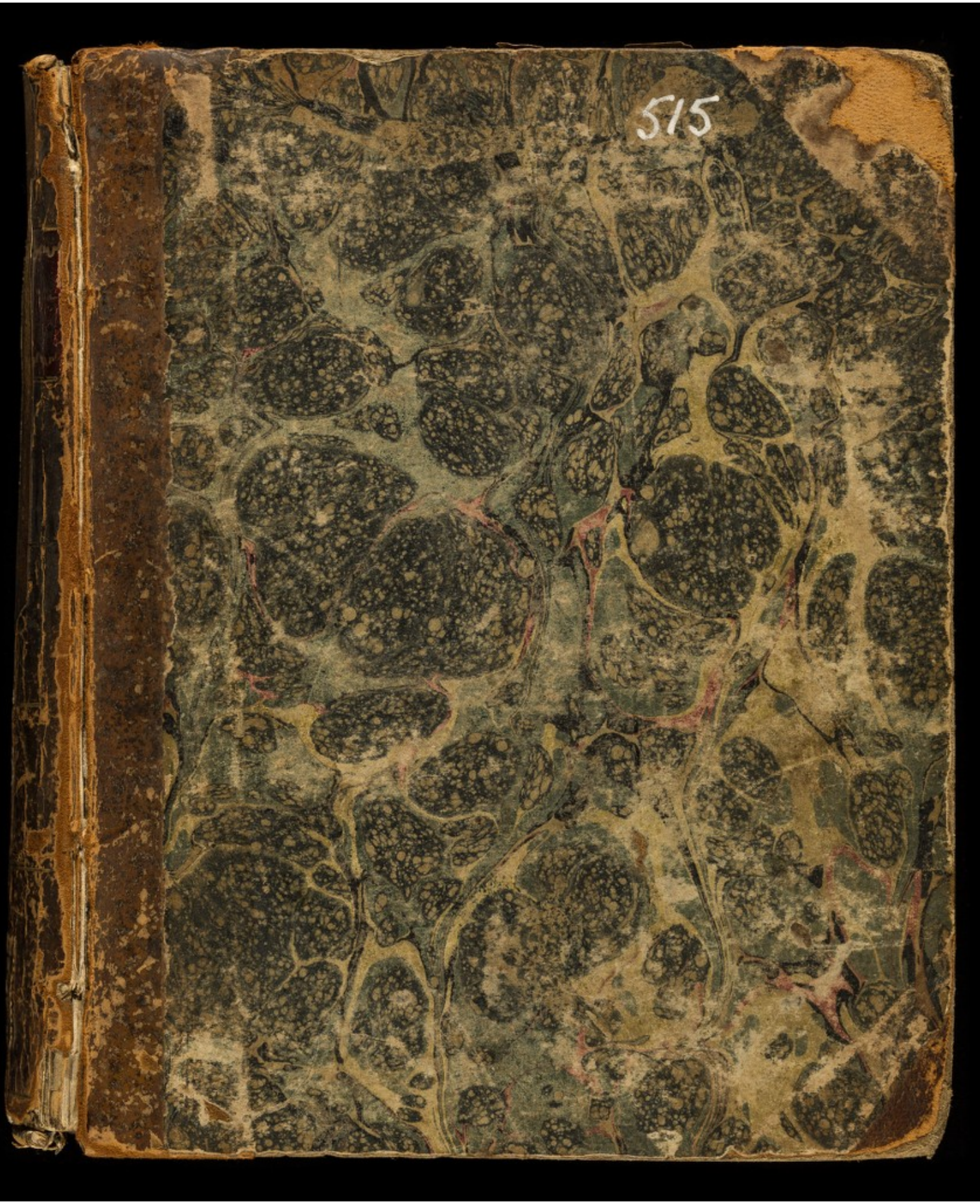
Edward Burton's notes on the lectures on anatomy and surgery given at St. George's Hospital (London) by Everard Home. Vol. 2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Notes of the Lectures

given at St. George's Hospital,

by

Everard Home Esq.r

taken in

1807.

by

Edward Burton.

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Lecture the 8th

Amputation of the Breast.

The breast is liable to three diseases, which sometimes require an Operation. The first, and most simple, of these, is an enlargement of its substance; the Breast may now and then increase to such a size, as from its inconvenience to induce the Patient to get rid of it. The second is a Scirrhous affection of it, and the third is Cancer.

As the breasts in Women are more liable to Cancerous diseases than any other part of the Human body, and as on account of this disease, the Operation, which we are now going to consider, is very frequently necessary; it will be right first to look into its origin, symptoms, and modes of termination.

Diversities have been the Opinions entertained as to its origin being constitutional or local. There are no grounds for considering that

as constitutional; though I have
for the constitution may be affec-
-ted so as to produce local com-
-plaints, has not been ascertain-
-ed.

On the contrary, that the Origin
of Cancer is local, we have facts
almost amounting to proof. We
find that Cancer arises without
any visible cause, so that there
is no proof to be deduced from
that, but in other parts of the
body a local Disease shall be-
come Cancerous. I have seen a Tu-

- mour on the foot which had preceded it
so as to require removal, (and on be-
-ing cut into, had the appear-
-ance of an indolent tumour,
connected with one of the bones,
owing to part of it being left, re-
-turn and take on a disposition
exactly similar to common Can-
-cer. I have seen one of those Cysts,
which are frequently met with
in the scalp, where allowed to burst,
throw out a fungus, and put on a
complete Cancerous appearance.
If, then, any Tumour is capable of

becoming Cancerous, we must ad-
-mit, that Cancer is capable of
affecting the Constitution.
It is almost peculiar to a certain
period of Life, and is particular-
-ly prevalent in women of about
50 years of age and upwards, after
they have ceased menstruating.
In warm Countries it is very rare.
An injury will produce Cancer;
and indeed there are few instances
of this complaint, in which the
patient does not refer back to some
accident.

A tumour shall form in the breast at five and twenty years of age, remains indolent like the Cancerous age, and then shall become Cancerous. These Tumours are sometimes readily distinguishable from all others; but not unfrequently the Nature of them is very obscure.

A well-marked Cancerous Tumour is in its origin, small, round, indolent, and void of pain, detached from the surrounding parts, at first stationary, but afterwards increasing. In its texture

it is harder and more compact than
any other Tumour, from whence
the name of Stony Cancer; and in
proportion to its bulk, very heavy.
Its increase is uniform and progres-
sive, frequently accompanied by
lancinating pains, which arise from
compression of some nerve.
I should therefore, suppose, that
any Tumour, which was in its be-
-nign manifest, is much less lia-
-ble to become Cancerous, than one
first perceived by accidentally
feeling it; and here I should be much

more alarmed as to the future event. This is the character of true Scirrhous ~~Cancer~~.

All Tumours, however, which are met with in the breast, are not of this Nature. There are a great variety, the Nature of which it is very difficult to understand. Scrophulous Tumours are softer in their texture, and free from those lancinating pains, which attend an advanced state of Cancer. But I have known a Tumour, supposed to be a Scrophulous

one, which turned out Cancerous.

There are two ~~the~~ modes, in which Cancer propagates itself. The first is, by contaminating the surrounding parts, making them bad, and part of itself. The other is, that before any fluid has been formed in it, it is capable of contaminating the Lymphatic vessels, which absorb the Virus, and take on the same disease.

There is yet another mode of Contamination peculiar to the skin, which is as yet totally inexplicable.

It begins, when the disease is at some distance from the skin, and the skin itself moveable on it, by a Tumour about the size of a pea's head, which increases to that of a pea. At this time, others of the same kind arise round it at the distance of ½ or ¾ of an inch a-part, without the least visible connection with the first. These proceed farther and farther from the original Disease, till they cover the whole trunk. There is not the least doubt of their

being Cancerous; but whether there
there is a Glandular Structure
in the Skin, which takes on the
Cancerous action more readily, and
the Skin is the medium, through
which it is carried, is unknown,
though this appears most plau-
sible.

The first approaches of a Cance-
rous Tumour to the Skin are
marked by its being elevated above
over the Tumour, and has it
spreads more rapidly than any
where else in the body. When

the Tumour is allowed to go on,
it generally reaches the Skin, (which
becomes glossy and discoloured, and
the nipple partially sucked in)
before any Secretion takes place
from it. If then shows not a
fungus which discharges lym-
phid fluid.

Sometimes Cancerous Hypostatis
are met with; these likewise
discharge the same lymphid fluid.
There are some of the Tumours,
which though they do not at first
present a Cancerous appearance,

become so afterwards. Many
indolent Tumours by accidental violence become Cancerous.
When a Cancerous Tumour is divided into two parts, it puts on
the appearance of a hard, ligamentous, lineal substance; the
interstices of which lines are filled up with a substance softer
than the lines themselves. Not
unfrequently small Hydatids are
met with in these interstices; which,
though they form no part of the dis-
ease, and have no direct commun-

- nection with Cancer, yet ~~they~~,
as well as other Tumours, may be-
- come Cancerous.

After a discharge has once taken
place from a Cancerous Breast,
the Ulcerated parts, becomes attach-
ed to the pectoral Muscle, and
Axilla, and the patient, worn
out by pain and continued irri-
- tation, sinks.

If all Scrophulous affections
were truly and distinctly marked,
it would become of consequence to
distinguish them from Cancer.

Part as they frequently become
Cancerous, it is not material. If a
Scrofulous Tumour or Apostrate,
it may be treated as one in any o-
ther part; but if it remains in-
-dolent, it is to be treated as one
liable to become Cancerous.
The fluid, which is discharged
from a Cancerous Ulcer, is proba-
-bly nothing more than Lymph,
belonging to parts in the neigh-
-bourhood, which does not return
on to the Constitution.
Under what circumstances, then,

may or not perhaps of the Breast
be performed. But to this, there
has always been much objection,
the younger Surgeons being fond
and the older more diffident, con-
-cerning this point. It certainly
succeeds much better than
any other Operation.

It was formerly supposed that
where there was no affection of
the Pectoral Muscle, or glands
of the Axilla, the Operation
might be performed in safety,
but by practice has proved it to be

of Thereunder. We have no absolute
guides; and if it is performed and
fails, the Life of the Patient is
much shortened

When the Tumour is small, circ-
-umscribed, and at a distance from
the Skin; where no change has
taken place in the Lymphat-
-ics, and the Skin is not tuck-
-ed down, we are warranted in
performing the Operation, and
there is some ground for security;
because in all probability
it has not acquired its connexion

quality, unless it was Cancerous from the beginning. But not further.

When the glands of the Axilla are enlarged, when the skin is sucked down, or when the Tumour adheres to the Pectoral Muscle, the spread is stopped by, when an Operation would have been of any service. Are we then to decline an Operation? I think not. There is some difference between proposing, and according to the wishes of a patient for, the Ope-

-ration, although in contradiction to our better judg-
-ment. This, however, holds good
only within certain limits; if
the Disease has proceeded so
far, that we are sure the Ope-
ration will not succeed, it would
certainly object to it. It is, there-
-fore, necessary to attend to the
circumstances of disease, under
which it may be performed; o-
-therwise it would be nothing
more than the senseless removal
of an extraneous Tumour.

There are two reasons for removing a Tumour in the Breast. First, the fear of it's becoming Cancerous; secondly, the anxiety of the patient as to the Nature of it; so that several sorts of Tumours, appearing likely to become Cancerous, are sometimes removed from an error in judgment. This however, is productive of no mischief.

When the Tumour to be removed is as small even as a marble, and there is no fear of

of Contamination, if a small portion of the Breast is removed, it leaves a disposition in the remainder to take on diseases which it had not before; so that it is also hopeful how far the breast may be wounded; and on this account I think that the whole breast should invariably be removed.

We will suppose a Case, where there is a considerable Tumour, a puncture existing at the nipple, and one

of the Glands in the Axilla al-
-tered in Structure; this being
the stage in which the Ope-
-ration is most complex.
When the Operation is performed,
should the patient be laid on a
table or seated in a chair? The
latter I think preferable, as the
parts are more readily come at, and
I know no one disadvantage at-
-tending it.
This point being settled, the next
is, in what direction the first
Incision should be made. Two

have been recommended. The first, in the direction of the fibres of the great pectoral Muscle; the second, perpendicularly. The determination of this point, tho' in Theory it may appear trivial, yet in the Operation is of the greatest consequence.

The disadvantages attendant on the perpendicular incision are, that it is impossible to come at the Tumour, with the same facility as in the other incision, which circumstance will create an ban-

-ragments; and that it is necessa-
-ry to keep the mind's eye on the
glands in the Axilla, in which
respect the perpendicular inci-
-sion is of all others the worst. I
should therefore have no hesita-
-tion in making my incision
in the direction of the Pectoral
Muscle, whatever was the size
of the Tumour or state of the dis-
-ease.

When the nipple is sucked in,
not only all that portion of skin,
which is in contact with it, should

be removed, but even part of the sound skin beyond it; so that the incision should be as free as possible. Consequently an oval portion of skin should be removed, and two semi-lunar incisions made, in such a manner as to enclose it. The patient arm is to be held extended by an assistant.

It is prudent to begin with the ~~under~~ under Incision, and then make the corresponding upper one, the two angles of which are to unite with those of the under one.

The reason for beginning with the under one is, that while you are making your incision, the parts are not hidden by the blood from the upper one; whereas if you had made your upper one first, the blood would fall down on the parts below, and entirely obscure them.

Having made your two incisions, (which are to go completely thro' the skin and cellular membrane) the gland of the breast, with every thing surrounding it, is

to be dissected out. I would begin on the upper and inner part, next the Sternum, as there is less reason to expect disease here, than any where else. The dissection is then to be continued downward, through the cellular membrane connecting the gland of the breast to the Pectoral Muscle, which is very loose; therefore, if any thing hard is cut through, you are wrong. An assistant is then to raise the Tumour, and the under part is to be dissected off, in the same manner,

When the breast is removed, the parts towards the Axilla are to be carefully examined. If all is sound there, the operation is to be continued; but if there is any thickening of the vessels or Lymphatics, they must be traced, until you get beyond the diseased part, and if, in order to do this effectually, more than the semilunar incisions are requisite, a simple one is to be continued towards the diseased parts. If any of the glands are dis-

cased, they are to be removed.
Small injects will be sometimes
divided, which are apt Breakout
into the Abscess, and occasion
considerable Hemorrhage.
If the disease extends further
than you are at first aware of,
every part at all diseased in
Structure is to be removed; for
if is now too late to consider
the Propriety or Success of the O-
peration.

Having got beyond all the dis-
-ease with the Knife or Forceps,

the whole mass is to be drawn
downwards; but you are not to
venture upon doing the operation,
by cutting down through the
vessels, by which it is remains
connected with the body, since
they come from large trunks near
the heart. It will be wise to pass
a needle armed with a double li-
gature, through the middle
of them, at some distance from
the parts you mean to bring
away. Soon after I should then
fasten the ligatures tight, &

the operation may be completed,
by dividing the mass of vessels be-
-low the Ligatures.

When the ligatures are not applied,
before the vessels are cut through, much
trouble frequently arises in getting
at the vessels, and much blood &
time are lost.

In such cases as the one I have
been describing, the chances of
recovery, God knows, are few; but
if every part of the disease is
not removed, they are a little less.

The assistant should lay his fin-

-gen on any objects, which he may
observe bleeding, for the time be-
-ing, and remark their situation;
so that after the operation he
may present them out to the Sur-
-geon. Care is to be taken to secure
every object that bleeds, with the
Tenaculum; and the skin is then
to be brought into close contact.
Although a great deal of it has
been removed, yet by bringing the
head of the patient to the side
operated on, and the arm down-
-wards, the skin may sometimes

be brought together, when at first sight, such a thing would appear impossible. Solid Russian plaister, compresses, and rollers are to be used in such a manner, as effectually to bring every part in contact with the surrounding ones.

It is of great consequence to keep the patient perfectly quiet. He must neither eat nor drink any thing (a little barley water to allay thirst excepted) nor speak, for secondary Haemor-

there is more to be feared in this
operation, than in any other,
whatever. It arises, however, com-
-monly from the patient's being
allowed to talk and see her friends,
and soon. A strict adherence to
quiet and refrain from food are
the proper preventatives.
Some patients, particularly young
women, are unable to bear the
loss of blood, and are very subject
to fainting after the operation;
and then they recover so slowly,
that at the end of eight or nine

days, no progress is made in the healing of the wound. When this is the Case, the patient should be carried into the open air, and some liniment used, which will restore the action in the parts, and heal the wound.

In what way does the disease return? It returns in two ways; either in the skin, or in the Axille. In the former it is just within the edges of the Cicatrix; and here the disease returns very quickly after the

Operation, sometimes even before the Cicatrix is entirely healed. A small Tumour appears, and the number is soon increased to twenty or thirty; they are then beyond the reach of an Operation. However, in one instance, where there were only two of these Tumours, I destroyed them with Caustic, and there was no recurrence of the disease.

The second mode of its recurrence is much slower, the tumour

varying from a month to two years. The Glands become diseased, and no advantage can accrue from removing them; but if the Patient is particularly anxious about it, they may be removed. In one Case, I removed them three different times, but the disease returned after each removal, and in the end proved fatal. Once performed the Operation at the request of a Lady, in whose Axilla one of the Glands was en-

- lanced and gave her the most excruciating pains; and while I was dissecting out the gland she suddenly cried out: "You have done it! I am easy." Afterwards found, that I had divided a nerve, which had been rendered tense by the enlargement of the gland.

Lecture the 9th

Lithotomy.

The Stone is a disease, for which hi-
-thurto no remedy has been found,
and this is readily accounted for,
since the Calculus has been analy-
-zed, there being no medicine able
to dissolve the different substan-
-ces, which it contains.

Its composition was formerly unknown,
but it is now found to consist of Uric
acid, triple phosphate of Ammonia &
Magnesia, Phosphate of Lime, and

by a bed of lime, composed in the main of
less animal matter and blood. Un-
-fortunately the stone is now for-
med of one of these earths, and no me-
-dicine can dissolve them all, as they
are acted upon by directly opposite
means. Hence, though it cannot
be diminished, its progress may be
stopped, and it may be made lighter.

A Calculus is formed in two
situations: in the Pelvis of the kid-
-ney, and in the bladder. When
in the former it is known in its
formation and increase, and more

compact in its structure, when in the latter, it is loose in its texture, and gentle in its progress.

Calculi sometimes descend, into the bladder, without the patient's being conscious of the descent, and they are supposed to have formed there. That they generally form in the kidney, is however, demonstrated by the symptoms, which so frequently occur in their passage to it. The symptoms attendant on Stone in the Kidney are, great pain in the Loins, vomiting, disorder of the

bowels, and violent spasms. These arise from the Stone irritating and obstructing the Ureter, and not from its being in the Kidney. But when a small Calculus drops out of the Kidney into the Ureter, then symptoms become still more violent. The pain in the Loins increases, darting along the Ureter exactly in the direction of the Ureter; sickness of the Stomach occurs, and if much exercise is used, the urine will be common-ly bloody.

The Calculus is sometimes two or three days in its passage from the kidneys into the bladder, sometimes as many months.

It will be necessary to know what will expedite its passage. The use of Opium gives relief, and takes off the sensibility of the canal; and, especially if assisted by the warm bath, and as much exercise as the patient will admit of, will hasten and favour the passage of the Calculus.

The Surgeon or Physician in at-

- tendance (for this is a case of Medical & Surgery) should be systemic - ly carefull to prevent the increase of the Calculus in size; for, if it be irregular, or too large to pass, the remainder of the patients existence will be rendered miserable, and his death inevitable.

The Caustic of Potash is found to dissolve the Uric acid, and this should be given in as large doses as the patient is able to bear.

The patient should sometimes become suddenly very ealty; you may

then be certain that the Calculus has got into the bladder. You are not however to rest here; for the only way now to get rid of it, is to cut externally through the Urethra. It is a common practice in this stage of the disease to give Opiates; which is extremely wrong, little or no irritation being produced by a Stone of this size. On the contrary the object should be, to excite the Peristaltic motion of the bladder, and make it pass its contents rapidly. This is best

effected by the use of the Tepid
bath, and moderate exercise. Strong
and brisk purgatives should be given,
and the patient should take diluted
drinks in large quantities.
These remedies frequently have the
desired effect, particularly if applied,
immediately after the Calculus
has passed into the bladder.
A patient of mine, who had a
Calculus in his kidney, attended
with very distressing symptoms,
during his journey to Town, passed
it into the bladder. Dey-

I caused his Case to him, and told him to continue the use of the means, which I have before stated, till he voided it through the Urethra. When he returned home, finding no more of it, his Surgeon advised him to be quite well, and desired him to leave off his medicines. The patient wrote to me about it. I told him by all means to continue them; and in three weeks afterwards he voided the stone entirely. This with three others, which a Case of this Na-

time reveal, how much pain and trouble may be saved to the patient by an intelligent practitioner. Had this Case presented itself to Thomson, than it did, there would have been no chance of a cure but from an Operation.

Many people have an idea that the stone may be dissolved in the bladder; and I allow that there are circumstances, which apparently favour this Opinion. One Case of this kind, with which I was particularly acquainted, (at

being in the presence of my own fa-
-ther) appeared to support it. He
had a Stone in his bladder, but
the symptoms, far from encrea-
-sing, gradually disappeared, and
he suppposed, and many others sup-
-posed for him, that he was per-
-fectly well. I learnt, however, on
examination after death, that
the Stone was formed in the blad-
-der, - that the prostate gland
had encreased to such a size, as to
prevent its coming in contact with
the neck of the Bladder.

If the remedies, which I have recommended, do not succeed in expelling the Stone, the strongest alkaline medicines must be had recourse to. The Stone, if not brought away, will produce Symptoms from three different causes. First, from pressing on the neck of the bladder; secondly, from its rough surface wounding the internal membrane of the bladder, and thirdly, from its increasing to such a size, that it falls upon, and by its weight presses on the Ure-

-tem, and produces all the bad
symptoms arising from costive-
-ness &c. This last was the case
with the father of a friend of
mine, who had symptoms of stone,
which disappeared on his taking
medicines, using exercise, and so
on; like sometimes afterwards he was
attacked with sickness, violent pain
in the bowels &c. Then it was e-
-vident, that the stone produ-
-ced no inconvenience, like it be-
-came sufficiently large to press
on the rectum; when it created an

entirely different set of symptoms.
And the case of this kind I met with
in a Gentleman, who in coming
from Jamaica, in a violent storm
somehow or other received a vio-
lent blow on his loins. The same
symptoms as in the former case
came on, and as they were suppo-
sed to proceed from the Sa-
turn accid at the time of the
storm, every thing that could be
thought of, was tried in vain for
his relief. Sometime after his
arrival in England, the pain in

his bowels, costiveness, and vomiting had increased to such a degree, as to occasion his death. Upon inspection of the body, a large stone was found in the bladder, pressing on the rectum, which had in all probability been the occasion of his decease. It is very likely, that at the storm, the stone must descended from the kidneys into the bladder; and was the cause of all the symptoms, which had been supposed to arise from the blow.

Sometimes a Stone will remain
in the bladder, without being
productive of any Symptoms at
all, neither pressing on the neck
of the bladder before, nor the rec-
-tum behind, even when it is
grown to a considerable size.
If a patient, exceeding the age of
fifty years, has a Stone, with
its increase, the posterior Lobe
of the Prostate Gland encreases
also, and defends the neck of the
bladder, from its Irritation.
I would never have you hastily con-

-clude from observing those symp-
-toms commonly attendant on the
stone in the bladder, that there
is one. Although the cause of
the symptoms is in the blad-
-der, yet the symptoms are not
all there. That, which, if I
was asked, I should say was most
characteristic of stone in the
bladder, is an acute pain or
burning sensation in the glans
penis; and I believe there is no
other symptom attendant on this
disease, not to be found in others.

No Operation is to be determined
on in consequence of present symp-
toms, or from any former evidence.
The patient should be carefully ex-
amined, and the Surgeon should
abide by the result of that ex-
amination. I would be certain likewise
that it was present immediately
before the Operation; nor would
I operate at all, unless another
Surgeon could distinctly feel the
Stone as well as myself.

A Gentleman came to me from
the Country with Symptoms of Stone;

his Surgeon than having previous-
-ly examined him, and having ex-
-pected him there was none. On ex-
-amining him myself, I very rea-
-dily felt one, and told him so.
He again returned into the Coun-
-try, and gave his Surgeon my opi-
-nion, who a second time exami-
-ned him, and still was unable
to find the Stone. This staggered
the patient, and he wrote to me
on the subject, saying that he
was unwilling to submit to any
operation, unless he was perfectly

certain of his having a Stone. Explained to him in answer, that if he came to Iowa, I should not think of performing any Operation on him, unless other Surgeons were assured of the existence of a Stone, as well as myself; but that his Surgeon not feeling it was no reason in the world, why I, or the Surgeons, should not. However, on a subsequent examination, his Surgeon felt the stone, as it had by that time probably enlarged; and the Gentleman afterwards underwent

the Operation for its extraction.

The first manual part, which the Surgeon has to perform in this dis-ease, is that of sounding the pa-tient. This is done, by passing a metallic instrument into the blad-der, and endeavouring to strike the end of it against the Stone, to ascertain if it be there or not. This is apt to alarm the mind of the patient very much, and therefore requires great delicacy in the mana-gement of it.

Teachers of Anatomy, (as far as they

an Anatomist only) are quite in-
capable of laying down rules for
the Introduction of Sounds, &c
Sheaths, &c; as the difference between
them parts in the living and in
the dead subject, in health and in
disease, is extremely great.

Examining for a Stone with the
Sound, or, however, by no means
the best method; for in Cases,
where, from long disease, the
neck of the bladder is become
much thickened, the Surgeon
frequently thinks he is searching

the bladder, when he is merely twisting the wound about in the thickened parts.

By the external orifice of the Ure-thra is always very irritable in this disease.

In passing the wound into the bladder, you are very frequently stopped at about five inches from the orifice by a spasm of the internal membrane; & by this Surgeons are not unfrequently led to mistake the nature of the disease. But a

little perseverance will get over
this; and you will then (gene-
rally speaking) meet with no
obstruction, till you come with-
in an inch of the entrance of
the bladder; and this second
obstruction is frequently mista-
ken for a diseased prostate gland.
I had no less than eight cases
brought to me in one year
brought to me by different
Surgeons, all decidedly suppo-
sed by them to be stricture,
which turned out to be stone

in the bladder, and they all had the Operation performed on them.

When you are unable to succeed in passing a Sound, you will frequently be able to succeed in passing a Bougie, which, being composed of materials, unlike the metals, yields more than metal. In some cases I have been able to succeed in passing the flexible gum Catheter without the stilette. It would be advisable to

attempts passing the Sound more than once, as these parts may not be so irritable one time as another.

When these means fail, I have found that passing a flexible gum Catheter only, and drawing off the water, has enabled me to discriminate between a Stone and the thickened coats of the bladder. Here too, the Stone will sometimes be brought into contact with the end of the Catheter, by the contraction of the

I was led to this mode of obtaining
quieting a Stone by accidental
circumstances. A Gentleman,
a Banker in this Town, had
been under the care of several
eminent Surgeons, ~~in this Town~~,
who were all positive from the
Symptoms that he had a Stone
in his bladder; but they were
none of them able to find any
on Sounding him. When I was
called in, his wife took me
aside, and told me I might do

any thing to disturb her hus-
band; for that his mind was
so terrified at being so often disturb-
ed, that he could not bear it, and
had resolved to suffer the excru-
ciating pain no more. From the
symptoms I also was certain that
there was a Stone; and I enquir-
ed if he had ever had his water
drawn off. The answer was, "No."
"Well then, Sir (said I) that is the
only thing left undone, and that
we will now do." Accordingly I
introduced the pliable gum

Catheter, and having drawn off
a considerable quantity of water,
I distinctly felt a knock at the
end of it, which was produced by
the bladder contracting and
throwing the stone forwards on
it. In this way succeeded, while
much more experienced men
failed. The patient felt immedi-
-ate relief; but I told him that
I had felt a stone in his blad-
-der, and that as soon as he had
walked across the room, all his
pain would return, and that

nothing would effectually relieve him but the operation. Upon the whole I think this the best method of ascertaining the existence of a Stone.

Having done this, the first question, which will probably be asked is, what is its size? This is altogether out of the power of the Surgeon to form any idea of. The only means of getting rid of a Stone is by an operation.

Having said so much upon the

Symptoms of Stone, and the mode of ascertaining, whether it does exist or not, I shall now proceed to describe the Operation for its removal, and the Instruments which I conceive most proper to be used in it.

The first thing to be done, and the part, which is in general attended with the greatest difficulty, is the Introduction of the Staff.

Almost every Anatomist supposes, he lawfully the urethra and in

improvement of some Instrument
or other. In this instance par-
ticularly, some recommend one
kind and one curve, and some
another, and in every Surgical
Instrument-makers shop you
will find varieties of them. But
none of them are what we want:
we want an instrument, which
can with the least difficulty be
introduced into the bladder,
and for this purpose, is that
with only one curve, though of
the largest kind, with a regu-

- gular rounded grooved inwards
for the back of the Gorget.
The end of the Staff should not
be pointed but rounded off.
The introduction of it is some-
- times extremely difficult; for
there may be instances in which
it is very easy to pass the fly-
- ing Catheter and Sound,
and yet much trouble may a-
- rise in passing the Staff. The
best Surgeons have been extreme-
- ly puzzled in this part of the
Operation. I have seen both

Sir Cæsar Hawkins and Mr. Hunter upwards of three quarters of an hour about it. ~~[illegible]~~ This difficulty is much increased by the position of the patient; indeed it is best, if the patient is of a very irritable habit, to keep the staff before he is bound, as that mode is not apt to create so much dread, and is the more familiar way of grasping it.

But when introduced afterwards, it should be introduced into the

Urethra with the convex part
towards the body of the Patient,
that the Surgeon may know
when he is got to the Perinæum.
He is then to tilt it up towards
the neck of the bladder.
If the Instrument will not pass
further than the Perinæum,
no force is to be used. If it is
grasped the Surgeon should wait,
till the spasm has subsided:
if it is entangled in the in-
ternal membrane of the
Urethra, it should be withdrawn

a little, and the finger passed in-
to the Rectum will be of ser-
vice in the detection of it.

Having passed the staff into the
Bladder, the stone should
be evidently felt both by your-
self and your assistants. The
Staff from the edges of the groove
in it, generally causes more ir-
ritation than any other In-
strument; and sometimes, when
the Bladder is in a very irri-
table state, it will be im-
possible to feel the stone at all

with it. But I would on no ac-
-count operate, unless I could
perfect at the time.

On one instance where Mr Cline
and myself met for performing
the Operation, we could neither
of us feel the Stone in the
least with the Staff; but a
Sound happening to lie in the
room, we introduced that, and
easily felt it. When the Ope-
-ration was performed, four Stones
were extracted.

Having got the Staff into the

Bladder, and felt the Stone, an
assistant should hold it in such
a direction, as will make that
part of its groove at the Peri-
-neum, prominent. In order
to do this properly, the assistant
should be able to perform the
Operation equally well with
the Operator.

The groove then being felt, an
Incision should be made di-
rectly on the most prominent
part of it, and carried down
between the Sphincter Ani,

and the Tuberosity of the Scrotum.
You should avoid beginning the
Incision too near the Scrotum,
as the blood is apt to insinuate
itself into the cellular mem-
brane, and frequently afterwards
alarms the Patient with the
idea of ~~fistulous~~ Mortification,
as well as sometimes being pro-
ductive of fistulous Ulcers.
The groove of the Staff should
then be felt, and felt distinct-
ly. It is to be laid bare, and the
point of the Gorget introduced

upon it, and passed into the bla-
-dder.

A great variety of Instruments
have been invented for this
part of the Operation of Lithot-
-omy; among these, the Bi-
-coni Catheter, which has been
much used and recommended
by the French Surgeons. In
young subjects, and their small
size will do very well: indeed, in
these a Scalpel or Director is
all that is necessary for the
Operation. But in some cases,

particularly when the bladder is surrounded by fat, they are all objectionable. And as the Life of Man is so short, and the experience of any individual in this operation can be but little, I think time should not be thrown away in trying a variety of Instruments; but that we should at all times use such an instrument as will serve under any circumstances. On that ground, therefore, I never use either of those Instruments, though

I am very ready to admit that they may sometimes be used with advantage.

Now, Likewise, every Teacher of Anatomy is finding fault with the clumsiness of the Instruments; and almost all of them have one of their own Inventing; but this is Anatomy merely. I do not want an Instrument which will make a clean cutting wound into the bladder. Of what use can it be, when immediately afterwards

a large pair of iron forceps are
to be rudely thrust into it? Or
the contrary there is a decided ad-
-vantage attending a clean wound:
it is more likely to bleed than
another.

You do I like the double-edged
Gorget. I once performed the Ope-
-ration with it at the desire
of a friend, but the Hæmorrhage
was more profuse than any I
had ever seen. I would by all
means recommend the single-
-edged one. Upon the whole I

Smith & Hawkins's original Gorget
the best: at least I have seen no
improvement on it.

It is to be recollected that the
point of the Staff is now to
be thrown up clearly into the
bladder; and in order to do
this, the handle must be
taken by the Operator, and drawn
towards him. If you neglect to
do this, and you attempt to
push the Gorget, you may push
it like the day of judgment be-
-fore you can get it into the bladder

-der, as you are pressing it on the
groove of the staff at a right
Angle. But if it happens to slip,
it will go through the rectum
or any where else.
In running the Gorget, there-
-fore, into the bladder, the
hand must be lowered, to
keep the beak of the Gorget
in the sweep of the groove of
the staff.
Sometimes the parts are
so thickened, that I have found
considerable difficulty in cutting

though then, and it may be
then requisite to enlarge the
Incision. But we should be
prepared for all accidents; for
I know of no Operation where
self-confidence is more wanted.
You should be likewise well
acquainted with the Instru-
-ments you use. In one inc-
-stance, a Gorget which I
had used several times before,
whether from being spirits
water too hot, or some other
circumstance, on passing it

into the bladder, broke in 95
the middle, and one half was
left in my hand, while the
other half was left buried in
the muscles of the Perine-
-um. This was a circumstance
for which I was totally unpre-
-pared, and what to do I did
not know. However, by taking
a pair of common dressing
forceps, and pulling and twist-
-ing the end of the piece back-
-wards and forward, I succeeded
in extracting it.

If these gouges cut, the Gorget is undoubtedly introduced into the bladder. The finger may now be introduced on the groove of the Gorget into the bladder, by doing which you may now and then learn something as to the size and situation of the stone.

The forceps are to be introduced in the same way. There should be of that size, which you think most advisable, and adapted to the particular circumstances. They are better too long than otherwise;

and should always be introduced on the Gorget, before you withdraw it. When they are in the bladder, and the Gorget is pulled out, they are to be slowly opened, as far as the bladder will permit, and then closed gently, so as to get the Stone between them.

If the Stone be of a moderate size, by this means it will be laid hold of, and if this can be done, there will be little difficulty in extracting it. The forceps are to be turned in the bladder, and the Stone grasped

gently, so as to pull rather than
push it, for fear of breaking it.
But I have a thousand difficulties
arise, as the Stone is very liable to
break, & you may be unable to get
hold of it.

Once saw an operation performed,
where the Surgeon was unable by
any means to lay hold of the Stone,
which embarrassed him so much,
and lengthened the operation to
such a degree, that patient af-
terwards died from loss of blood
and debility. Should I have gone

-rally observed, that when the Ope-
-ration lasts only a few minutes,
the patient commonly recovers; when
longer than half an hour, it is al-
-most always fatal.

When the Stone is flat, the for-
-ceps should be opened as wide as
possible, so as to get beyond the
edges of it, which is the most favo-
-rable mode of grasping it. I com-
-monly turn my forceps round with
the Stone in them, that I may
the more readily extract it.

The Case of the last patient, on which

I performed this operation at St. George's Hospital, was such as I had never met with before. The Stone was by far the most flat, and the largest of the kind I had ever seen; and I conceive that had the patient been lusty and fat, I should never have been able to get hold of it at all. But in this instance my finger was long enough to introduce, and ascertain it's shape, which removed the difficulty. Still, however, it was not easy to overcome the Stone, as part of it extended beyond the forceps, and it

are liable to be thrown back, by the
Ring against the adjoining parts.

When the Stone breaks,
the pieces should be extracted as fast
as possible; in this case the blad-
der is apt to contract round the
pieces, and renders their Extraction
very difficult. Warm water should
afterwards be thrown into the blad-
der to wash it out.

If pus is inflamed, Coagulable Lymph
will sometimes be thrown out, and
a Stone formed in it, which is by
far the most difficult kind to

A considerable Hemorrhage sometimes takes place during and after this operation; but pressure will generally be sufficient to stop it; or if it will not, there is so much difficulty in taking up the vessels, that styptics are the only things you can apply. This forms the principal reason, why the Surgeon should not cut hastily.

Long Dressings will sometimes cause the Vessels to loose their tone, and then the patient must

immediately else. I have long ago given up all Ideas of securing the Vessels with a Ligature, and Styptics have been my only resource.

Now that I am upon this subject, I may mention a circumstance which has lately occurred in this Country, and the misfortunes of which you ought all to be aware of. One of the King's Horses had a Stone in his bladder, and the Operation for extracting it was performed by a French Farrier. The Cut would in all pro-

probably have done very well, had it not been for the extreme ignorance of those who attended. They regularly every day injected warm water into the bladder through the rectum, in order, as they said, to wash it out, and clean it. By this means they every day removed the coagulable lymph, which had been formed within the last four and twenty hours, and the house, in consequence of this treatment, died.

The bladder on the contrary is

to be left entirely to study, and a tranquil state and low regimen enjoined.

Lecture the 10th 90

Stricture

Is a disease of no small importance, since there is no one, to which young men of the present age are more liable; none more distressing in the symptoms and consequences, which it produces; none in which a cure is more gratifying both to the Patient and Surgeon, or which sooner tends to an increase of credit and fortune. It interferes so much

with the natural functions of the neighbouring parts, that it produces more local and constitutional symptoms than almost any other disease.

Stricture consists of a permanent contraction of any part of the Urinary canal, which lies between the external orifice of the Urethra, and the neck of the bladder.

It is produced in two ways:

First, it may be the effect of a diseased action in a portion of

the membrane of the Canal,
which may contract unnaturally,
and loose the power of relaxation.
Here no alteration of structure is
apparent; it is merely a simple
PoD of the internal membrane.
Secondly, Stricture may be the
consequence of an alteration of
Structure in the parts surround-
-ing the internal membrane of
the Urethra; they become thick-
-ened, hard upon, and diminish
the natural passage. This is com-
-monly the effect of Inflamma-

- mation of one of the Pacunæ.

Although the symptoms in each nearly correspond, yet, as they are diseases of a different nature, and require different treatment, I shall consider them separately.

But before the diseased state of the Urethra can be explained, it will be necessary to attend to its natural state.

Like every other excretory duct, it is capable of being in two states, a relaxed and a contracted one. In this canal such

variety of shape is peculiarly ne-
-cessary, because two fluids are at
different times to pass through
it; one is in a large, the other in
a small quantity. On this account
there must be a contraction throughout the whole length of the
Canal; but in the act of Deglutition, one part is particularly so. The semen as it is formed,
is gradually collected in a cavity
near the bulb of the Urethra;
and as at that time it is all
thrown out, the parts beyond

become doubly contracted, to prevent its being thrown backwards into the bladder. Now the disease, of which we are speaking, is no other than this spasmodic contraction rendered permanent. The different causes producing it, are so evident, that it is not worth while to dwell long on them. As irritating substances are numerous, so will the causes of stricture be numerous.

It is sometimes found in children of five or six years old: here the cause

is generally gravel. There are instan-
-ces of its having been produced by
Onanism, before the parts are able
to perform their office. It will be
an effect of any Inflammation to
the membranous part of the canal,
consequently of a Venereal Gonorrhea
when the symptoms run very high.
But Stricture is more commonly
caused by the means used for the
cure of it, particularly irritating
injections. Repeated Blisters will al-
-so produce it.

When once Stricture has taken

place, that circumstance alone becomes a cause of its increase; that is, if one portion of the canal becomes narrower than the rest, when the patient makes water, the whole stream cannot pass through this diminished passage, and the bladder cannot empty itself with the same degree of force in the same time, so that part of it strains against the sides of the contracted portion, and the water is passed with much less facility. Thus the action of the bladder becomes in-

creased; and the whole of the canal on the outside of the stricture, not being now fully dilated by the diminished stream is always in a state of contraction between the strictures.

In this contracted state the urethra is more readily acted, so that the obstruction is sooner increased than formed. The bladder, when irritated, is capable of producing a spasmodic contraction in the middle of the urethra, as I mentioned in the last Lecture; this

become a cause of a succession of
strictures.

The most common situation, in
which this disease is met with,
is at seven inches and an half
from the external orifice of the
urethra. Next to this, the most
frequent is at five and an half;
a third at four and so on; and
from the same cause the oyster-
-coal orifice itself shall contract
also.

The progress and succession of the-
-tures is so regular, that by exami-

-nation with a bougie you may almost ascertain the number of them, and the duration of the original one. This is certainly not without exceptions, but still it will hold good as a general rule. A succession of Stictures may be considered as a symptom of the original one at seven miles and an half.

Before the Symptoms are considered, a few words may be said on the second Kind of Stricture. Gonorrhea itself is Born inflames

the Sacrum, so as to cause them
to form prominent tumours, but
when Injections are used, more vi-
-olent than the parts can bear,
(and what is mild to one Obstetrix
may be extremely violent to ano-
-ther) this is very common. I have
seen in warm climates the mild-
-est injections composed of weak
solutions of Sugar of Lead, cause
this kind of Stricture, on which
account I never used any In-
-jections at all.

In general it may be distinguish-

-d by feeling the corpus spon-
-geum externally. It is most com-
-monly about two inches from
the orifice of the Urethra. I never
met with it close to the exter-
-nal orifice, but within this month;
when a Gentleman came to me,
who had been labouring under
stricture for fifteen years; and
on my attempting to pass a bou-
-gie, not the smallest one would
pass the least distance into the
Urethra. From what experience
I had had in this disease, I concluded

there were several others. On enquiring into the history of the case, I found that he had on some occasion used a weak solution 14 years ago, but that it gave him so much pain that he fainted, and never used one afterwards. On removing the stitches, I found to my surprise that there was no other disease, and the consequences proved so, for the patient was always popping his breaches, the whole of the intestines having become so enlarged by the constant press-

sure of the Urine on it. That it has
lost the power of Contraction.

The most common symptom of
Stricture is a frequency and difficulty of making water. The
patient shall feel a desire to
make water, but shall wait
half a the whole of a minute,
before the stream shall pass.
He shall then void his urine
pretty well; but when he thinks
he has done, he shall have a
great inclination, and only make
a few drops, or a little shall es-

-ape involuntarily. Added to
this an occasional discharge
from the Lacuna of the Ure-
thra.

These Symptoms are increased
by connection with women, mast-
-ing, catching cold and so on; and
as the disease increases, they in-
-crease likewise. The neck of the
bladder becomes disturbed, the
internal membrane irritated,
and the whole of the parts thick-
-ened. In nineteen cases out of
twenty, this stage of Stricture

is mistaken for diseased prostate gland; and Anatomists, as they are the most exact, are particularly liable to this mistake. The finger is pressed up the rectum, and every thing turned, which is felt there, is naturally supposed to be the prostate gland, but in this disturbed state of parts, every thing becomes turned. There is no end to the symptoms of Stricture. The effects, which it produces on the bladder, are very considerable.

As the Muscular coat is obliged
to exert greater force in order to
expel its contents, it becomes
inflamed and thickened, but this
not regularly, some parcels of fibres
being naturally stronger, and much
more or less easily affected, than
others. This irritation produces a
secretion from the bladder it-
self as well as the membrane
of the Urethra, which is not un-
frequently mistaken for a Ve-
nereal Gonorrhea. At one time
this is Lable just on the appear-

-nce of common pus; at another
it is like hair powder falling
to the bottom of the Vessel; and
sometimes coagulable Lymph
alone is secreted.
When there is a greater state
of irritation, there is an appear-
-ance not unlike Urine mixed
mixed with the Chyme; this ari-
-ses from flakes of coagulable
Lymph swimming in it. Now and
then there is a ropey kind of fluid,
about the consistence of bird lime:
this appears to me to be entirely

and solely the detention of the Prostate Gland.

I go on with the increase of the Desire ——— There is an occasional retention of Urine, for as the bladder becomes unable to evacuate its contents, it fills, so that it is unable to contain receive any more. When the Urine is lodged in the Ureters, which produces a dilatation of their orifices, and which length the Urine can no longer discharge freely from the Kidneys, and the conse-

-quence is a collection in the
Pelvis.

When the bladder is distended,
if the patient endeavours to make
water, it will be forced back a-
gain through the enlarged Ure-
-ters into the Kidneys, which is a
very distressing symptom. Some
instances I found this the only
symptom, and considered it as quite
unconnected with the Stricture;
but upon removing the Stricture
it entirely went off. Sometimes
a long Series takes place in the Kidneys;

and it is more common, than is generally imagined.

Besides these, which may be termed local symptoms, there are many others, the sympathy between the Stomach and Uterus being as great as between any two parts of the body. The Stomach has hardly accumulated irritating substances with it, (particularly acids), before the effects is felt in the bladder & Urethra; and this sympathy was so great in one patient of mine,

that if at dinner he drank a glass of wine, he was obliged to leave the room immediately.

The Stomach is affected by the Urethra in the same manner.

The Urethra, therefore, independent of disease itself, is capable of being affected by all complaints arising from irritation of the Stomach.

The most frequent constitutional symptom, is a violent pain, sometimes so an ague fit: a shivering shall first come on,

then a hot fit, followed by a pro-
-fuse perspiration. This should Rep-
-eat more particularly, when the
parts are in an unusual state of
irritability from exposure to cold,
which is the most common cause.
I have known it brought on by
the patient's setting his foot on
a cold hearth. This symptom is
sometimes the only considerable one,
and as it is natural that a pati-
-ent in an ague fit, should not
make water well, the cause is by
some Surgeons mistaken for the effect.

Besides this paroxysm, a Phthisis
shall keep up a kind of low re-
-mittent fever, occasioned by dis-
-turbed constitutions. This shall
produce Ulcerations over the whole
body — Irregularity of the bowels,
they being at one time extremely
bound, at another very loose —
Sore throat — Affections of the
Tongue; and a variety of others.
Sometimes the Symptoms pro-
-duced by it are of a very odd na-
-ture. I knew one Patient who was
always attacked with a violent

pain in the region of his stomach, after he had been about two hours in bed, which he lost entirely on the removal of the structure.

The Symptoms are very much regulated by common circumstances. For instance — A patient has come to me, and told me that he was unable to make water in a standing and as he has- -ed through Bond Street, but after- -ter making him sit down by the fire, and give me a minute

History of his case, he has found not the least difficulty in doing it.

Some of the modes in which dissipation of brain comes on, are very curious. A patient goes to the play, and after sitting for some hours in a hot crowded house, gets into a cold damp hackney coach, which perhaps has been standing for the last twelve hours in the rain, and then finds himself unable to make water.

Shutting is almost constantly

attended by Piles, which are oc-
-casioned by the perpetual strain-
-ing in making water. In many
Constitutions it is attended by a
considerable depression of spirits,
and renders the patient miserable
from the idea that he is unfit
to marry. Having said so much
of the Symptoms of the Disease,
we will now consider the mode
of its increase, where no means of
relief are afforded.

When Stricture has once taken
place, it increases uniformly and

progressive by no degrees well as number, though from the irregularity of the symptoms, there at first sight seems little reason to think so. The progress is sometimes deliberate and imperceptible; this kind is the most dangerous.

The doctors, the days, all, become more liable to be affected. The patient loses his general health; the frequency and difficulty of making water increases. The patient sometimes is able to make water only in the sitting posture,

and then should stain for half an
three quarters of an hour, before
he is able to make it out at all,
and at last with the utmost
difficulty.

Stricture, though at first they
consist of a mere fold of the in-
ternal membrane of the ure-
thra, thinner at the edge, and
thicker towards the base, yet grow
thicker in substance, and harder
in texture. At this time they
frequently extend in length so
as that instead of having two, or

with the hand from one another,
you shall have one an inch and
a half long.

At last the substance becomes
changed in its nature, and in
some instances almost Cartilagi-
nous, though the structure is
commonly Ligamentous; then the
Structure becomes less liable to
Ossification or Spasm.

In this stage, the mode of treat-
ment is very difficult. When
relief is not given, if the Pass-
sage through the original Stric-

- tion becomes a very small one, the Urine will scarcely be able to pass through it; and if any mu- -cus from the bladder approach- -es the Stricture, it will entirely block it up. The bladder is by this time so accustomed to retain the Urine, that it will remain half full without much inconvenience to the Patient.

Under these circumstances the parts become attended in- -flammation, and Ulceration com-

-monly takes place. If this be-
-gins behind the Stricture and
involves the Stricture in it, the
Patient has a chance of recovery.
But it more commonly proceeds
along the internal membrane
of the Urethra, and then to
the surrounding parts, which
is a great drawback to the cure
by this means.

When the Ulceration is confined
behind the Stricture, the Urine
gets into the Ulcerated parts;
but the Constitution is now so

worn out, that it is seldom able to stop the pacts from running into Mortification. If this has taken place, in testing at the orifice of the Urethra, a blackening will be observed round the edges of it, which is the internal membrane mortified.

But where the symptoms are not so violent, and the Constitution is good, a small dose of Mercie sometimes gets into the cellular membrane behind the Scrotum, where it re-

mains, till it forms an abcess,
which points externally and breaks.
This fresh disease is not to be
considered as a misfortune, but
as salutary; for when a fistula
in perinæo takes place, the
Patient is no longer liable
to an suppression of Urine, as
long as the fistula is kept
open. If, instead of bursting
externally, this abcess burrows
to the surrounding cellular
membrane, the Patient will
inevitably fall a sacrifice to it.

Here then a practice is to be
adopted, which does not hold
good in any other part of the
Body. As soon as any tumour
is perceived in the Perinæum, it must
be immediately punctured with
the point of a Lancet; Whatsoever
ever Matter is contained in it,
(and there is always a small
quantity) may be evacuated,
lest it should diffuse itself into
the surrounding parts. A puncture
ture, even if nothing follows
it, will relieve the patient; for

if you only divide the Area or Fascia surrounding the Bulbous part of the Urethra (which, when affected, produces the most violent symptoms) you are doing good by giving a free exit to any matter or urine, which may collect there hereafter. The patient, when this Tumour is forming or formed, suffers little or nothing from the local complaint, but is affected by fever and other Constitutional Symptoms.

In one case of this kind to which I was called in, I found the Physician & Surgeon disputing concerning the nature of the Fever under which the patient labored. I examined the Epigastrium, and found a small indistinct Tumour. They asked me my opinion of the fever. I said: "Damn the fever: I'm not thinking of the fever — I'm thinking of a Tumour which I have found in the Patient's Epigastrium, and which, if not opened,

will kill him in four and twenty hours." "Oh! then open it by all means," said one of them. I told them that it was very easy to talk and tell me to open it, but that I did not know how to open it. However, I ventured to puncture one part of it with the point of a Lancet, and out came about a teaspoon-ful of a fluid, so fetid, that we were almost obliged to leave the room. The removal of this entirely relieved the patient, and the fever quickly left him.

This humour, I know from experience would have destroyed him in a few hours; so that I would advise you to watch the first moment of the formation of such humour, where it is suspected to be coming, and risk every thing to puncture it.

Sometimes, if the bladder is enflamed, coagulable Lymph is thrown out in large quantities, and its cavity is nearly obliterated. This inevitably terminates in Death.

There is another termination of Stricture in Death, the most melancholy, the most miserable I have ever witnessed. I mean the bursting of the Bladder, which happens, when it is not punctured. When it becomes distended beyond its natural state, some portion, less able to sustain the pressure than the rest, forms a Sacculus, and at length gives way. The Urine then escapes into the Cavity of the Abdomen; the Patient is then attacked with

Symptoms of Peritoneal Inflammation, Fever, Delirium; at other times, with Symptoms extremely similar to those of Hydrophobia, and this.

I would, therefore, never hesitate, when other modes of relief have proved ineffectual, to puncture the bladder. This frequently succeeds, whereas the idea of leaving the bladder to burst is horrible.

Lecture the 11th

The Treatment of Stricture.

Having in the last Lecture endeavoured to point out the Nature of Stricture, the Symptoms which it produces, and its modes of termination in Fistula in perinæo and death; I shall today proceed to point out what I conceive to be the best method of treating it.

Were the Urethra a tube composed of inert materials, and

rigid in its form, nothing would be necessary, further than a mere wedge, to bring back the parts to their natural state, in the case of fracture of it. But unfortunately, the parts in which this disease takes place, have in a healthy state the power of varying their dimensions, which power becomes increased in disease; so that an irritation, which is incapable of causing the urethra to contract in a natural state, shall in disease

produce contraction in it sufficiently strong to close up its whole canal.

This simple mode of relief, therefore, becomes ineffectual, because it is not only necessary to restore the parts to their natural state, but to take away their increased irritability, and keep them so. If the Urethra in a particular spot is contracted to half its regular dimensions, mechanical force will restore it to its original state, but mechanical force

will not prevent its contracting again. It is here to be recollected, that, when the parts are tran-quil, the tube is not open, but collapsed; a circumstance, which in some measure accounts for the difficulty of passing instru-ments into the bladder.

There are two methods, and only two, in general use, by which a Stricture may be relieved: the one is, by dilating the con-tracted part; the other by destroying it.

The first of these is effected by
means of an Instrument, termed
a Bougie. It has been compound-
-ed of a variety of substances, in-
-fluenced, like every thing else,
by Fashion. At first it was no-
-thing more than a leaden plum-
-met; but this being found too
harsh, one of a more quiet Na-
-ture was invented, the proper-
-ties of which are merely mecha-
-nical. Durande was the first,
who left off the use of leaden
Bougies; he succeeded in making

the Public believe, that the composition of his Bougies was Medicinal, and that they would cure Strictures, Gonorrhœa, Ulcers, &c. of the Urethra. They are commonly made of wax and oil, with some other ingredient to give them various degrees of hardness. The properties required of them, are, a polished surface, a certain degree of pliancy, and at the same time of consistence. For, though the urethra will bear a Bougie

with a rough surface, yet the uncertainty of it's use is much too great to allow of one.

The use of this Instrument has been continued for above a Century; so that there has been abundance of time to ascertain the advantages, and disadvantages arising from this practice. Had it been always successful, or even generally so, no other mode (particularly a more violent one) would have been admitted on to use. But this mode has

has been attended with great inconveniences and objections; for the irritating power of the Bougie is so great, that I have even sometimes seen fresh Stictures produced by its use. It is not an uncommon thing to pass a Bougie in the latter stages of Gonorrhœa, and from that I have known Stictures proceed. Notwithstanding, however these objections, it is necessary for you to know, when the Bougie may be used advantageously.

When the Disease is incipient, when the parts have been only permanently contracted, and no alteration has taken place in their Structure, it will in many instances be able to relieve it, sometimes in two or three applications; the parts will fall back into their natural state do very well. But unfortunately, the patient seldom is aware that he has the disease, tile sometime after it has begun; or, if he is, suffers

it to make considerable progress,
before he applies to a medical
attendant. It is generally first
observed after connection, when a
discharge comes on, which the
patient mistakes for Gonorrhœa;
or by its producing Strangury.
If the disease has extended be-
yond certain limits, the Bougie
will have little or no power; for
in general the edges of the contract-
ed part are grown so hard, that
they turn off the point of the
bougie; so that, though the instru-

is large enough to admit a cran-
-quil, it will fall to the under
part.

The Urethra has no irregularity
in its upper surface, but many
in its under one; the bulb and
orifice of the bladder, and the
roughness and irregularity of the
internal surface, all causing
difficulty in the passage of In-
-struments. You, therefore, that
we are better acquainted with
the Nature and dimensions of
the Urinary Canal, we are enabled

to pass much larger Instruments,
than were before used. Formerly
they were pushed forward, and al-
-lowed to find their own way in-
-to the bladder; and as they were
small, (and of course pliant) they
were impeded in their progress
by every irregularity in the U-
-rethra, which they came to.
Large Bougies, however, are ex-
-tremely different: and not being
pliant, they should be bent some-
-what into the form of a Catheter,
especially at the point. In passing

a large Bougie, merely with a view of examining the Structure Urethra, attention should be paid to this circumstance, and caution should proceed cautiously.

Metallic Bougies have been used and they will sometimes pass into the bladder, when Bougies made of softer materials will not; but there are always cases of irritable Urethra, mistaken for Stricture, Metallic Bougies are much the worst that can be used in Stricture, particularly

when attended with much irritation or spasm.

When the Bougie is passed into the bladder, and immediately withdrawn, I have found that I get on faster with the dilatation of a stricture, than when it is suffered to remain for some time. When passed, it causes a kind of spasm or uneasiness in the parts, which goes off in two or three minutes. But if the Bougie is suffered to remain in the urethra long, this is

succeeded by a second, at the end of ten or twelve minutes; and I therefore never allow the Bougie to remain in long enough to bring on the second spasm.

Of them the softest, and least irritating, kind of Bougie excites irritation by being allowed to remain in the canal any length of time, how much greater irritation must be produced by a Metallic Instrument?

The common Bougie is always of use to a certain degree, as when

Spasm comes on in a Stricture
not of itself inconvenient.
In very great Strictures, the Cat-
gut Bougies are much the best,
for if they are pushed through the
Stricture, the Urine will swell
them, and thus a much larger
passage is formed.
The following circumstance may
be remarked as a common one,
frequently attendant on this dis-
ease, when it is attended with
Strangury. A Patient, having one
Stricture at five inches and a half

and another at seven inches and a half, if a Bougie is passed six inches, and is grasped by the Stricture at five and a half, will undoubtedly make water. But if the Bougie is not acted on by the first, there is little chance of his doing it. This arises from Sympathy, for when that at five inches and a half contracts, the other dilates.

Upon the whole, I say, when the disease affecting the Urethra can be got over, or acted upon, by

by the common Bougie, I would
advise you never to make use of
more violent means.

But as there are some structures
where this Instrument will be
insufficient, other means must be
resorted to, & more violent, but
at the same time more efficac-
ious, and often much quicker
in their effects. These means are
dilating the diseased parts, in-
stead of dilating them.

Mr. Hunter first made use
of Lunar Caustic, in the cure of

Strictures. Some attempts at Lacha-
-rotics had indeed been made be-
-fore this time; but the Knowl-
-edge of the parts was then so
insufficient, as to give small cause
for satisfaction, and they were
very soon laid aside. When a Bou-
-gie would not pass into the Blad-
-der, Mr. Hunter proposed ma-
-king a passage by Caustic.
Having seen his practice, and
the effect of Lunar Caustic, as
used by him, I was led to the
idea, that where the orifice of

the Stricture was only contracted,
the Semen Cains he might have
the power of destroying that con-
traction. I was the more incli-
ned to this opinion by a case
then under my care.

A Gentleman had a Stric-
ture in his Urethra, which
would admit of the introduction
of a Catheter to draw off his wa-
ter, but from the Spasm, would
not allow the water to pass off
by the natural means. After
trying in vain to cure it with a

common Bougie, & laid the Canula, and removed both the Spasm and Stricture by two applications of it, neither of them having ever after returned.

This was certainly a particularly fortunate case, as I afterwards found; but it was a new fact, and led me to adapt the practice of applying it, in a more free and extensive manner than I had hitherto done.

I have stated to you in a former Lecture, that the original Stric-

- ture was generally at seven inches
and a half from the external ori-
-fice of the Urethra, and that if
this is allowed to remain for a cer-
-tain time, a succession of them
will be formed anterior to the o-
-riginal one. What affects one, shall
affect them all; so that, if you
pass a bougie armed with Cam-
-bric through a Stricture at two
inches and a half without entir-
-ly destroying it, and then carry
it on to one at five inches, the
very circumstance of passing it

on to that at five inches I shall
bring on a fresh contraction on that
at two inches and a half, and the
next time you endeavour to pass a
Bougie, I shall not pass the first.
Was led to this by observing the
practice of Mr. Hunter. If he
could enlarge the first sufficient
ly to allow him to go on to the
second, he did go to the second, and
so on, till he came to the original
one; which, in endeavouring to get
through this he never frequent
ly made all the others return.

Being aware of the cause of these failures, I was enabled to get over this difficulty, and knowing more accurately than had been general ly ascertained, the size and dimensions of the Chambers, I was enabled to use larger Bougies, & so not to leave the Electrum half obscured.

When we recollect, that the canal in that part in which the original Electrum is, forms a curve; it must be evident, that unless the Bougie be large, it will be forced

particularly against the lower an-
gle of the surface, when it reaches
the covered part of the Canal; and
on this account Mr. Thurtell was
hardly even able to succeed in ascer-
taining what kind of surface should be
wished.

Having made these general ob-
servations, it may be requisite
to give some directions concerning
the use of the armed Bougie. In
examining the parts, in order to
ascertain whether there is any
disease at all, or in what degree

dis, the size of the Urethra at
its orifice should be remarked, which
is often very deceitful. A common
Bougie should then be passed, as
large as the orifice will permit,
to learn what length of the Ca-
nal is in its natural State. I
have frequently been able to pass
a full sized Bougie, when all at-
tempts with a smaller one have
proved ineffectual.

A friend of mine, a Surgeon, had
a patient whom he suspected to
have Stricture, to which he wished

to apply Caustic; the patient, however, objecting to it, he brought him to me for my sanction of the Application of it. I was going to pass a full sized Bougie, when the Surgeon stopped me, and said: "Good God. Sir, I cant pass one of the smallest size". I said, that was nothing at all to me; that it was my business to see whether the patient had a Stricture or not; and accordingly I passed this large one completely into his bladder, to the great astonishment of my

friend. The fact was that the irregularities on the under surface of the Urethra had allowed the small one to stick in them, while my large one passed over them without impediment.

For the purpose of examination, the white Bougie is the best; for after having ascertained how far it will pass, without obstruction, if it is suffered to remain some time opposed to the obstruction, it is rounded and will in gene-

ral being back on examination of the edge of the aperture through that part.

The next thing to be done is to remove the stricture. This process consists in passing an unarmed Bougie down to the part, in order to enlarge its internal membrane, so as to allow the armed one to reach the spot; and then in passing the latter, with as much velocity as prudence will admit of, from its edge, the end of it must be in contact with the whole stricture

of the aperture of the Structure
will admit a Bougie of two sizes
less than that which has been
proposed, an armed one of the same
size should be preferred,
which in two or three applications
will entirely remove the Structure.
The Caustic should never be re-
peated oftener than every other
day. Indeed it will frequently be
prudent not to apply it for four
or five days, or till the parts are
perfectly tranquil. Once a week
or ten days before the effect ceases,

it is not to be applied before.
Having got over the first Stric-
ture, you are to go on to the
second, and the same mode of
treatment is to be observed.
When you get to the narrow of the
Stricture, the armed Bougie should
be removed: and as the solution of
the Caustic is apt to fall on the
lower surface, that part will
be perforated first, on which ac-
count you should examine the
unarmed Bougie after passing it, to
see when you have got through.

When this is the Case, care should be taken, that only the upper part of the Stricture be touched by the Caustic, or only the upper surface of the Bougie armed with it. This, then, is the manual operation of removing a Stricture by Caustic; but in this practice there are many difficulties to encounter.

In the first place, the Caustic will bring on every symptom, to which the patient was liable from the disease, before its use,

and sometimes very violently; but
so I dare say any other.

There is commonly a paroxysm of fe-
-ver, if ever the patient was sub-
-ject to them before, brought on,
as soon as the Bougie has passed
the Stricture. If the mind is pre-
-pared for this, one half of the dif-
-ficulty is got over; on which ac-
-count I generally make a point
of telling my patients that this
will happen, or, when it does hap-
-pen, of giving them joy of the re-
-moval of the Stricture, and console

them, by frowning out the progress
of their cure. If it is so in sickness, what
effect on this, as well every other circum-
stance, a confidence in his surgeon
can have on the mind of the patient.

A Gentleman, whom Bowes attended
for Strictures, had an acute
fit, for which I had forgot to pre-
pare him. The Apothecary of
the family was immediately sent
for, and as Bowes attending him,
they thought it proper to let me
know of it. When I came, the

patient's wife ran to me, and told me, her husband was dying. I said, No, he was not dying, that I was glad to hear he was so ill, for that it was a necessary step towards his recovery. She was glad to hear that, she said, but hoped it would never happen again. "Yes, Ma'am" replied I, "it will happen twice more." And so it did; but my having foretold it, had prepared their minds for it, and it was considered as a very common salivation, rather than an illness; consequently there was no alarm

about it. This is commonly the case;
there is no alarm or anxiety, when
it is abated before-hand, but if this
is neglected the patient thinks he
is dying. In these cases nothing pa-
-tic is requisite, than to put
the patient to bed, keep him pa-
-fectly quiet, encourage perspi-
-ration, and make him drink di-
-luting liquors.

When the first attack is gone off,
which is attended with nausea,
vomiting, and sometimes laxity, re-
-lieving, commonly give some

warm opening medicine, such as
a Senna draught, to remove the
effects of the fit.

If the patient has a succession
of these fits, the treatment by
Caustic must be laid down.

Another common symptom is
Changing of the coming away of
the slough. This may appear para-
doxical, when I have before stated
that an armed Bougie relieved Spasm;
but at the time the slough comes
off, or if there is much Inflam-
mation in the parts, it may pro-

-quently takes place. It is to be
treated in the same manner, then
as when it came before; for it sel-
dom makes it appearance then
for the first time. All that
is necessary, is to keep a small Bou-
gie into the bladder, and let
it remain, till an inclination
to make water comes on. There
are, however, cases, in which a Bou-
gie cannot be passed, or if it can,
it does no good: Ten Fifty drops
of Laudanum will begin every
hour or two, till the spasm goes off.

Another much more alarm-
-ing effect to the patient, and
frequently to the Surgeon, is Hæ-
-morrhage, which is sometimes
very considerable. When I first
met with this symptom I was
myself much alarmed at it; and
many Surgeons have been deterred
from using Caustic on that ac-
-count. But there are two circum-
-stances, which have removed all
anxiety concerning it from my mind.
The first is, that in no instance
which has been under my care

have I found it fatal; and the se-
-cond, that in every instance in
which it has taken place, the
patient has become completely
free from every kind of obstruc-
-tion, and the disease has never
afterwards returned. This is a sufficient
compensation for any temporar-
-y distress.

I saw a Gentleman this morning,
(and to him that I should tell
the story) who was under my care
ten years ago for a stricture; and
he has had no return of it since.

One day after the application of the Caustic, a Woman happened to die. She had been in the city, and it was some time before I could be found, I suppose she must have been bleeding for full four hours before I reached her, and could not have lost less than two quarts of blood. I found her running about the room; in one place a bason half full of blood; here a washing tub, there a chamber pot and door; and the Surgeon making some kind of Bandage

another to stop it. I told him to get into bed, to take a basin, & let it bleed into it; and when it was quite full, to tye it, and then let it bleed fast again. I advised him to go to sleep as soon as he could, "and", I added, "in three days I will call again and see you." "Three days! Sir," says he, "I shall be dead in three hours. I told him, I knew better, and left him. After considering how confident I was about it, his mind became quite easy, in a few mi-

-ments he fell asleep, and the bleeding stopped. I called at the end of the three days, and found him quite well, except a languor about him from the loss of blood.

I was called in to one case, where I found the patient laid on a couch, and two Surgeons had been setting up with him all night, pressing his precordium with their hands.

Another patient of mine, a tailor, who was a good hand at making knots, thought that by

stopping up the end of his penis
with his own, he could stop the blood,
and came to me, to shew me how
cleverly he had done it. "No" says I,
"you haven't done it; but you've
got yourself into a pretty scrape,
for you've pissed your bladder half
full of blood: but that's your affair,
not mine, I had no hand in it.
And now you must drink, little
you have lost this congulum a-
-bout, or you will not be able to
make water at all."

The fact is, that the vessels stop-

-pelgia, the Diachylon, are not large
enough to suffer the patient to
bleed to Death.

In one case, where I had applied
Caustic, an Apothecary came to
me, and told me my patient was
dead. When I asked if he had seen
him since his death, he said, no;
but that he was bleeding so fast,
and had lost so large a quantity
of blood when he left him, that
he must be dead by this time. I
swore he was not dead, and that from
what he had seen, he had no busi-

ness to say he was. However he stood me out, and I went to see my patient. I found him laid on a table, and covered all over with ice. On putting him to bed, the bleeding stopped, and he got perfectly well, having had no return whatever of the disease.

Another patient of mine, a Lieutenant of the Navy, got drunk, (which he had no business to do) after the application of the Caustic, and a Haemorrhage ensued. He came to me in a great fright,

and said he was bleeding as if he
was p-p-g, and that he would then
die me. I begged he would do no such
thing; I said, I did not want to see it,
an did I want my carpet and floor
stained and soiled with blood. I
advised him to go home, and get
to bed, and the bleeding would stop
of itself. He did so. The consequence
was as I had predicted, and he got
perfectly well of his Complaint.
I do not relate these cases by way
of a joke, but to encourage you with
a proper confidence in your practice.

This symptom, therefore, (the most tremendous in the eyes of many Surgeons) I should prefer having to any other, were I to be afflicted with the disease. Such violent Haemorrhage seems to alter entirely the disposition and nature of the parts.

These are the principal symptoms, which you are liable to meet with; but as they are all connected with the cure, they may be considered as fortunate events, rather than evils.

The most common mistake in

the treatment of this Disease is
passing a small Bougie.
A Gentleman came from Ame-
rica to put himself under my
care; but as his friends resided
in the city, they persuaded him
to stay there; and, as I would not
attend him in the city, he put
himself under the care of one
of the most eminent Surgeons
in that part of the Town, who
wanted to pass a large Bougie,
but the Gentleman would not
allow him. At the end of three

months, he came to me, and said
that his Stricture resisted all
the efforts of his Surgeon to cure
it. I was going to pass a large
Bougie, but he told me that
that was out of the question,
for they could not pass the smallest
at present, however, persisted in pass-
ing it, telling him that if he
refused doing what his Surgeon
thought proper, he would never
get better. I found a Stricture at
five inches and a half: but his
health was so bad, that I was

afraid to touch it, and sent him
down to Brighton to procure it.
When he got worse, and consulted
an Apothecary, who sent him up
to town again to me, and by him
sent me a written account of
his case on a loose piece of paper,
addressed the end, that it was a
last one. The Gentleman, anxious
to know his opinion of him,
read it, and was of course much
obliged to this wise Apothica-
ry for his information. After
getting through the first three

-ture, I found that a false pas-
-sage had been made by the small
Bougie in to the perineum; so
that the two passages resembled
the branching off of two roads.
Finding this, it was of no use to
apply the Caustic, because ap-
-plying it to the angle between
the two passages, was doing no-
-thing, or worse than nothing.
In such cases as these it is ne-
-cessary to have a solid instru-
-ment, so curved as to pass into
the bladder the right way, and

then the false passage will heal up.

In the other kind of Stricture, which arises from Inflammation and thickening of the Lacuna or internal surface of the Urethra, the same practice may be observed, but gently, and not to the same extent as in common Stricture. As soon as the Bougie will pass it may be healed like other hardened parts.

I forgot to tell the Students in my last Lecture that I never knew this

- tunes from after 50 or 60 years of
age; but there are some instances
where the patient does not suffer
severely from them, till after that
time. I should never apply Caus-
- tic, for the Urethra being kept in
- rritable, and liable to inflammation,
the keeping a Bougie every two or
three days, will be sufficient to keep
the Canal in a state to allow the
water a ready passage.

Lecture 11th 12th.

Diseased Prostate Gland.

The prostate Gland is a part of the human body possessed of little or no considerable degree of sensibility, nor do its functions appear connected with, or essential to the animal Economy. But it is so much connected with the neck of the bladder, and when enlarged, so much affects that organ, that I know no disease, which comes under the care of the Surgeon, more serious in its consequences,

and no one, on which we are more ca-
pable of affording relief.

The general form and situation of
the Gland, I shall presume you have
already acquired; but there is a small
lobe, (if that term may be used) the
situation of which it will be ne-
-cessary to explain, particularly
as an enlargement of this part
is connected with the disease of
which we are speaking.

It had been supposed that the
Prostate Gland in shape resem-
-bled a Heart; but it has been

Catheter found, by carefully dissecting the Vesicula seminales, and Vasa deferentia, that there is a small lobe falling up the space between them and the bladder. It was before known that an diseased Prostate, a lobe projected forwards, and caused the disease; but it was not ascertained that this lobe existed, when those parts were in a natural state.

On a former occasion I mentioned to you, that Stricture was often by a Disease of Growth. In the

other hand, diseased Prostate gland belongs entirely to the latter period of Life. No disease is then so common, and in the earlier part of Life more so rare. This is so true, that after sixty years of age, when a patient complains of difficulty in making water, my first idea is that there is an affection of the prostate; and there are very few persons at the age eighty, who are not more or less affected by this disease.

The Prostate Gland consists of

three parts, which have been termed lobes, two lateral, and a posterior one. These certainly enlarge very unequally. Sometimes the two lateral ones become considerably increased in size, without any perceptible enlargement of the posterior one; but it is generally the posterior one, which takes on the enlargement first. It has generally been supposed that the enlargement of the two lateral lobes creates a difficulty in making water. They most only do not do this;

but they do exactly the reverse; for,
as they surround the Urethra, they
make it larger than it was be-
fore, turning it from a circle in-
to a perpendicular oval. It is
not, therefore, this enlargement of
the bodies of the glans, which caus-
es the difficulty in making
water; it is the lateral enlarge-
ment together with the enlarge-
ment of the prostatic lobe, which
projects forwards through the coats
of the Urethra, and forms a kind
of valve, so as to impede the

passage of the Urine.

This lobe shall swell in consequence of cold, and shall subside, when the effects of that cold are removed. But if the disease has gone so far, as to obstruct up the bladder, or create a difficulty in making water, that any circumstance shall become a cause for its further increase; for in the attempting to make water, the pressure of the Urine against the projecting lobe, thickens it, and makes it project still more.

In Sheehan, the more the bladder is distended with urine, the worse is the situation of the patient, and the less liable is he to obtain relief. In the cancer from the state of the Urethra and glands already mentioned, you will see that it is very different in retaining Urine. I have stated, that when the glands enlarge, the form of the Urethra is changed from a circle to an oval; and that the prostatic part of the Urethra fills up the lower part of this

oval, and proceeds to a certain dis-
tance the passage of the Urine.
If, however, the bladder is disten-
ded beyond a certain limit, the
Urine should pass through that
space, which is above the pro-
jection in the oval, and the
patient make a tolerable quan-
tity. If this, you observe, does not
take place, like the Urine has
risen above the level of the
posterior projection. After this
it keeps running out through
the upper part, which gives time

to the bladder for accommodating itself to the quantity of Urine, and the patient makes water every five or ten minutes, to the great satisfaction of the medical attendant, who, generally speaking, supposes, that he is not to draw off the water, as long as it will come away of itself; and that he has done every thing, which is right and proper. Thus he allows the disease to go on increasing, till the constitution sympathizes with the bladder, and dyspeptic com-

or similar to those of a low fe-
ver, which end only in dissolution.

Under these circumstances,
is nothing to be done? Undoubt-
edly you are to take off the pres-
sure of the Urine from the neck
of the bladder, which can only
be effected by drawing off the wa-
ter. And as a patient is common-
ly unwilling to have this ope-
ration performed on him, as
long as he can pass his water
without it, the great necessity
for so doing should be explained

This Disease is so common, that it is often disregarded at first; but if it comes under the care of the Surgeon at an early period, by Physicians the attacks will generally go off in a short time. If, for instance a patient has caught cold, and a Shaking comes on, it will be advantageous to draw off his water, whenever it is required. But if the disease has come on gradually, by drawing off the water frequently and regularly,

the enlarged portion of the gland
will subside.

It is impossible to do two things
at once; so a Surgeon, when he
suspects the disease, usually
examines the patient per rectum,
to feel whether the gland is en-
-larged, without paying the least
attention to the bladder; con-
-cerning that he is to judge of
the disease from the size of
the gland. You must, however,
perceive, from what I have said
concerning the prostate lobe of the

Probable, that it is entirely out
of the reach of the surgeon, and
consequently that such examina-
tion is of no use whatever. You
are to judge solely from the symp-
toms. I am so strongly of this opi-
nion, that I have seen Pneuma-
-ny years past (before this pos-
-sible tube was known) mistaken
-by examination at all by the
nose. The surgeon, finding by his
finger that it is enlarged, must
consequently pass it up for a
last Case.

I am ready to allow, that there
is no medicine in the Pharmaco-
pœia capable of relieving an en-
-largement of the prostate gland.
I have attended these cases with
every Physician of eminence in
this Town, and seen them attempt
all kinds of Medicine in vain.
There is none, which will take
off the pressure of the Urine
from the enlarged gland, and
the only method of getting rid
of this enlargement is, by removing
the pressure, and leaving the fault

tranquil. They will then subside;
at least the cases, where they will
not, are very rare.

The mistake in the treatment
of diseased Prostate is in resting
at all on medicine, and not at-
tending to the bladder. For-
merly I did not invariably object
to the giving of Medicines, that
their efficacy might thus be
made evident to those who pre-
scribed them; but in attending
to one or two lessons of theirs to
learn it and consequence in the State,

I thought it my duty to object
to time being lost in giving them.
The Physicians said, I might do as
I pleased; that it would come to that
by and bye; but to their surprise
and my satisfaction, my patients
urine made water perfectly well
without their aid.

I wish here strongly to impress on
your mind two things: The first
is, not to put the least confi-
dence in Medicines; The second
to turn your attention entirely
to the bladder, and not suffer

your patient to strain to make
water, so as to let the blood
press against the diseased por-
tion.

Considerable dexterity is required
in passing the Instrument into
the bladder for the relief of this
disease. The Surgeon should make
himself familiar with the
difficulties attending its intro-
duction, and with the distinc-
tion from the natural passage.
I believe there are seven Surgeons,
who understand the management

of the Cathleter in this disease than in any other. I have come in contact with so many of the old roots, and seen them so deep-seated in the early stage, that I feel myself justified in making this remark; not by way of censuring others, but to impress on your minds the utility and desirability of this operation.

In all Cases of Dropsy of Urine from enlargement of the Prostate, no circumstance must be particularly attended to. The

is a mistake to keep over at the
mouth of the bladder, which is
not to be found in the natu-
ral state of the urethra, &
behind this forceps a kind of
cul de sac, or recess. These belong
to all stages of the disease.
There is also a hardness and en-
gorgement in the natural parts
about the orifice of the blad-
der.

By these four, any operator is
enabled to keep the instrument
as in a healthy subject, such

attempt will inevitably fail.
The point of the instrument get entangled in the cellular, and all efforts to push it forwards do mischief.

There are not the only difficulties liable to be encountered; for there is commonly a spasmodic affection of the uterus about five inches from its external orifice, which sympton I think is more frequent to meet with in this disease than in any other to which

these parts are subject. Indeed
I have seen this to such a degree,
that although I could pass a
flexible gum Catheter to the
neck of the bladder, yet when
the stilette was introduced with-
-in it, it was utterly impossi-
-ble to pass it at all.
You may pass an instrument
with any curve as far as the
neck of the bladder; but if
you have no Catheter, which
will keep its proper curve,
you are unable to relieve your

perhaps; and unfortunately flexible gum Catheters are always kept straight, that they may be more conveniently carried. If this is done, they will never preserve their proper curve when the stilette is out of them; whereas, if they are kept for years (months will not do) on a stilette with a certain curve, they will retain that curve in such a manner as to pass into the bladder without forcing it,

and this is the only instrument which can be used in this dis-
-ease.

I was sent for forty miles out of
Town to draw off a Gentleman's
water, and tried for a quarter
of an hour, changing from the
Catheter without the stilette
to one with it. I could pass
the Catheter without the
stilette to the neck of the
bladder, but not over it, and
when I used it with the sti-
-lette, it was impossible to pass

Instable. At last, however, having on without a bulletin, which retained its urine, drew off his water.

Sometimes there is no spasm in the middle of the bladder, but such an enlargement at the neck of the bladder, as no common cure can get over. In such a case as this, the use of the instrument should be increased almost to a semicircle, if required.

I was sent for a few miles out

of Power to draw off a Gentle-
men's water. She was about
two years of age, as I concluded
that then was because of the
Protest. Two of the Surgeons were
present, and several of the Ca-
dets were lying in the Ta-
ble. I not wishing to commit
myself, I begged them to take
one the whole history of the
Case; which whilst they were
doing, I took one of the Cath-
eters, in my hand, and was
handling it, when it broke.

I then took another, and having made the curve as great as I wished, I passed it into the patient's bladder, and drew off his water with perfect ease. They were much surprised at this, and one of them said: "Good God! Mr. Howe, do you always use such a curve?" I said no; but that in these cases such an one was frequently required to get the instrument into the bladder. I sometimes happens that the Catheter requires such a

cannot be got out with the bladder,
which impossible to pass it. The
a flexible gum Catheter will
enable you to succeed with a
little address. Suppose you are
enabled to pass the flexible Ca-
theter with a certain degree,
and not the greater, to the neck
of the bladder, but you are un-
able to raise it over the pro-
jection there. If the end is
not entangled by a fold of the
stricture, the end will frequent-
ly by pressure, and go on to the

Gladdon.

I dare say some of you have re-
marked before this time, how
dirty I keep my instruments, and
are surprised that it is not bright
and polished. This is a remark
very natural to an ignorant per-
son. But if, instead of this
rough rusty surface to my
stilette, I were to have a smooth
polished one, I should have no
command at all over my in-
struments; it would slip and
slide about, and be of no manner

When you meet with a case
where there is a difficulty in
keeping the Catheter, it will be
a wise measure to let it remain
in the bladder. For if you are
only able to draw it off once, you
might as well not have done it
at all; it being probable, that
when the water in the blad-
-der is drawn off, that with which
the Pelvis of the Kidneys is dis-
-tended, falls down into the
bladder, and the secreting part

being stimulated by pressure,
forces down a fresh quantity;
so that in a few hours the blad-
der will be as full as it was
before. Besides, if the parts have
been much irritated or inflam-
med, disturbed, when you go to
pass the Catheter again, so much
Inflammation may have come
on, as to render it totally im-
possible. It may with safety
be left in the bladder for two
or three days.

When there is difficulty in

passing the Instrument, advantage
may sometimes be derived from
passing the instrument up the
fundament, and bringing the
end of the Catheter forwards:
this is now and then the only
successful mode.

In some instances I have kept
the Instrument in the bladder
for 9 or 10 days together, and
no inconvenience has been felt:
in others, I have been unable
to keep it in, longer than an
hour and a half; for if the pain

- lieve I failed to see the irritation and erections are so violent as to render it impracticable.

Then is one kind of enlargement of the Prostate Gland which makes the passing of the Catheter more difficult than any I have yet stated. In the first place the protection tube is enlarged, secondly, there is a greater and quicker enlargement of one of the lateral lobes, than of the other, so that one side of the canal at this part

shall be convex, the other concave.
I met with a case of this kind
very early in life, when I knew
nothing of Surgery, but a good deal
of Anatomy. I was asked as a friend
to see a man at the Charter
House, whom the Surgeon &
Physician had given over. I
begged him to suffer me to
introduce the Catheter; but he
said that he had suffered so
much from repeated attempts,
that he would have it done no
more. It seemed, however, to me

so bound to let a man die, without
making any attempt to release
him, that I persuaded him to
allow me to introduce it, upon
condition that he would desist,
when I gave him pain. When
the instrument had got a cer-
tain distance into the ur-
ethra, it gently turned round,
so that the part, which ought
to stand upright, laid hori-
zontally. I was unconscious of
doing this with my hand, and
tried again, with the same effect

was produced. Trying the other side, it would not pass at all. As I did not give him much pain, I went on, but could by no means understand this. I took out the stiletto; still nothing further could be done; however, after twisting, and working, & trying for some time, I got the Catheter into the bladder, and drew off his water. The patient after this felt asleep, and expired. On examination of the parts after death, I ascertained the cause

of this turning round.

When the Urine has been retain-
-ed a certain time, the bladder
loses all power of action and sen-
-sation; there seems no sensibility
with respect to those parts, and
one would be led to believe, that
there was no urine in it at all.
I was sent for to a case of this
sort near Windsor. When I came,
I was told that there was no oc-
-casion for drawing off the wate,
as the patient was become quite
easy, and did not want it. I said,

that the specific purpose of my
going there was to draw it off; and
accordingly I drew off about three
pints. I told them that in a few
hours he would want it drawn
off again, and as I was there,
that I would stay and do it. This
I did, and left him; and four
hours afterwards he died.
I have mentioned two cases, where
I was too late; I will now men-
tion one, where this operation
was performed in time.
I was sent for to see a patient,

the nature of whose case I was acquainted with. When I got to him, he was beginning to ramble, and knew himself. My first question was, whether his wrist had been drawn off; and I was answered in the negative. I immediately drew it off; the patient was much relieved, and got quite well. But I believe that had been ten minutes later, I should have lost him.

In other cases, when the bleeding is over distended, delirium

comes on, and by such means recommending
By this fever; it is not however
fever; it is merely the sympathe-
-tic affection of the constitution
with the bladder.
I have met with two cases, in
which an attempt whether would
succeed in getting over the pro-
-jection formed by the Prost-
-rate at the neck of the blad-
-der. In one the agony was so
great, that the patient would
suffer no more attempts to be
made. When the parts were

examined after death. The prostate was found to be full as large as a common pear.

In the other, which was in a Nobleman, after several attempts to pass the instrument on, it went right through the bladder. This relieved him from the immediate symptoms; but as the instrument was not kept in, it was necessary to introduce it again in a few hours, when luckily it found its way again through

the same hole. She lived in this manner for five years, and was obliged to have a drawing made of the curve, that it might be ascertained again. When she died, the enlarged gland was found perforated.

In two other Cases I have known the Catheter push through the gland, without being, productive of any bad symptoms. Sometimes, when the Catheter is left, as the last drops are coming away, a very small bag of

is felt. This arises from the irritation of that part of the internal membrane of the canal, which is stretched by the enlargement of the gland; for then its sensibility is exceedingly increased.

When this disease has once taken place, it is very liable to return. Any irritation at the neck of the bladder will produce its return; it has therefore mentioned as a cause. Now that cause, which was not

remarked before that to be over known, is the attempts at Con-
-nection which, I am sorry to say, many old men are guilty of. This throws the remedial refuse, and all those hasty in a state of Irritation.

The life of old men is, perhaps, worth little; and you may say it matters and say, that life at any time is not worth much, but certainly it is a great object to render them comfortable & free from pain, while they do

life. Independent of this there are so many reasons why an Woman's life is valuable, the comfort & welfare of the whole family perhaps depending upon her existence, that the case of this disease becomes of the utmost consequence.

I have now, Gentlemen, finished this Course of Lectures, a task which I had imposed upon myself from a conviction of its utility, and I have the greatest

satisfaction in seeing from the regularity of your attendance, & from the constant attention which you have paid to what I have offered you, that my ideas of them are not in your opinions, unfounded.

I can take my leave of you, only by wishing you success in whatever branches of the Profession you may engage; and in whatever situation you may be placed.

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