1861

[Signature]

Robert Reid
Acute Pleurisy.
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Acute Pleurisy—acute inflammation of the Pleura.

Sent.

The sent of the disease varies somewhat within certain limits. The pleura alone may be affected in that to a very variable extent of the inflammation may attack the structures either simultaneously or successively. It is with these we have chiefly to do. The other inflammatory affections though intimately associated with the one in hand, evidently in many cases depending on the same causes, predisposing to and causing, do not come under our consideration here. This difference in the sent and extent of the disease has given rise to a division into certain varieties. These we will briefly notice.

Both pleuræ may be involved. It is a very rare occurrence however for Pleurisy to prove so extensive as at all events to be in itself dangerous. Of pleuræ on both sides though not so rare to have efficacy applied.
on one side & symph. on the other. When it does occur there is generally, though not always, some diaphragmatic irritation. This variety is called double or bilateral pleurisy. Again, the sac only may be implicated constituting the simple or unilateral variety. This is the form in which pneumonia, i.e., putrid pleurisy, presents itself in a great majority of cases. The right side is also said to be more frequently attacked than the left. When the whole of the contiguous sides of the sac into the heart become impacted it is termed general or the contiguous sides may happen only to a limited extent. The latter can division is partial & circumscribed or locular. According to the number of loculi formed it is called unilocular or multilocular. Besides the locular, we have other forms of partial pleurisy, as costal, pulmonary, pericardial, diaphragmatic & interlobar. Any one of these partial varieties may exist alone, but more frequently there are two or more mingling into each other as the disease has a great tendency to spread by continuity of texture. At starting mention was made of neighboring structures being implicated, either at the same time as the pleurisy or subsequently. This is especially the case with the lung & pericardium. Postmortem they may become implicated by simple extension of the pleurisy without pleural effusion from the pleura. But if there is clear evidence of the existence of a diastasis as the arthritis—then the decaying affection of the pericardium is impossible to the peculiar constitutional state rather than to mere extensive...
Etiology.

Pleurisy is usually met with as an echo of certain local affection. But often as none is always associated with some peculiar rheumatic state as the rheumatic arthritis. When related with such an affection causes will set up an attack. If such an affection occurs as an intercurrent affection during the progress of other diseases—say the various forms of neural disease, scoliosis, typhus or typhoid fever, the cause is certain either of some material or mental condition which seems apparent to render the system prone to serious inflammation. The causes are divided into two groups—1. predisposing 2. exciting.

1. Predisposing.

1) Age. Age occupies a leading place among the causes. It is much rarer in early life at least the 1st 30 years than in advanced years. In old age it is also comparatively rare unless in connection with the diabetetic state referred to. There is obviously the greatest predisposition to it among adults.

2) Sex also plays an important part here. Males are much more frequently affected than females. This is in all probability due to the fact that men are much more exposed to the influence of the exciting cause than women.

3) Diabetetic States. These have a marked bearing on predisposing to pleurisy. The rheumatic arthritis has
especially exert a great influence. In the great mass of cases of dreadful plague, there are sure signs of the existence of some other state—
(4) Nervousness in transmission. The disease, per se, seems not to be hereditary. But still this must be acknowledged to some extent at least as a predisposing cause, numerous as the diarrhoeic states, symptoms of, are transmissible. Consequently a greater liability inheres to some than other.
(5) Climate and locality. It is found in all climates and parts. It occurs most prominently where the climate is favorable—where the transitions are sudden and marked. As to locality, it is most likely to occur when the atmosphere is very moist. On the other hand, there is the greatest exemption from it in an equable climate and dry atmosphere.
(6) Circumstances of life. Under this head may be grouped several conditions, each of which tends in some degree or another to excite the inflammation. (a) Poverty is an admittted cause. Its action however is not so decided before the cases as near the termination, when it has a strong tendency to cause a lapse into the chronic stage, where otherwise resolution might have taken place after the acute stage. (b) Occupation. Those occupations which expose the individual to the influence of the thermometer, subject him to sudden and frequent alternations of temperature have a sneezing tendency. (c) Habit of breathing in connection with the exposure to the weather generally accompanying them almost necessarily act as a predisposing con
11. Exciting Causes.

The exciting causes of pleurisy are the same as the exciting causes of inflammation in general.

(1) If there be no more, the most common. But when it opens, the person is generally not in the enjoyment of good health. Cold applied to the feet or chest is an apt to set up the disease. Frequently it arises from the individual having got drenched with water & neglecting to change his wet clothes.

(2) Mechanical violence. The ends of a fractured rib or a penetrating wound of the thorax may occasion an attack.

(3) It may be excited by the extension of diseases from other structures. Thus it may take place from beneath of the lung, proceeding to such an extent as to leave a perforating ulcer of the pleura.

(4) Pleurisy is also joined in connection with cancers of the vertebrae. In such cases it generally comes on unexpectedly, & insidiously.

Anatomical Characters.

In pleurisy certain definite changes are found to occur. These take place with great uniformity in general & vary with the stage of the disease. The first change which takes place is in the vascular reaction of the membrane. This is either decided diminution of vital current. As a consequence of this the membrane becomes its
Sometimes & transparently. Along with these, there is
marked evidence of the inflamed part, from increased
vascularity. He cannot be said to be familiar with
this disease however as few patients here died when
the disease was at this stage. The most change
which takes place is the appearance of serum & conse-
quentible lymph. The amounts of lymph & serum
may vary absolutely & absolutely in the different
cases. If the serum predominates over the lymph, the
extemporary surfaces of the pleura, the peritoneum &
connect, are separated; but should the lymph be
in excess these they are united. Of the proportion
may be such as to cause separation at some
points & union at others. The lymph which first
appeared is often white & of yellow appearance — an
old person & those of a debilitated constitution
it is surely in appearance. The fluid appears may
in clear — more frequently it is slightly turbid from
small flakes of lymph, sedimentary corporules &
serous albumin & in a — or the turbidity may be
also in part due to a few drops of blood corporules
instead of one or a small amount of pus being present,
the fluid may be more purulent than serum,
crusty & compact. Besides all these, there
may also be present certain gaseous elements. The
latter may get admission into the one through
an opening in the lung, or it may be secreted from

the surface of the pleura itself, or another from the
contained fluid as the result of chemical change.
From the pressure of the fluid, the lung becomes
compressed & carpeniced. When the amount of
fluid is as large as the lung is much diminished
in size & pressed back upon its root. After this
state of smaller has continued for some time,
changes take place in the course of which
the greater part of the contents are absorbed
part of the lung becomes generally becomes organised & converted into bands of patches of
false membrane. When the fluid has been taken up
the lung expands unless the pressure has been
long continued maintained. These different changes have
been divided into 4 stages -
(1) The dry & the plastic
(2) the effusive & the Absorptive. This division, though rather
artificial, is good enough for all practical purposes.
There is really no well defined line of distinction between
the 4. In fact they pass gradually into each other. Indeed
two of them, the plastic & effusive, occur almost
simultaneously.

Symptoms.
The onset of pleurisy may be sudden or
or gradual. In the latter case we have a series of
symptoms developed, which may be regarded as
premonitory. They are not however of much import in
either diagnostic point of view, so they are
Common to pleurisy, with other inflammatory affections of the chest. There is a disturbance in the normal structure of health. There may be no marked fever but the patient is easily affected by cold and complains of languor and fulness. The hands are cachectic, the appetite impaired and the tongue foul. These may exist for some time before any notable advance is made in the progress of the disease. But there may be some of these precursory symptoms — the attack may be sudden, the symptoms characteristic from the very first.

**Local Symptoms.**

(a) Pain. This may be the first symptom to show itself — if not, it is among the earliest at least. It is localized in the chest. The usual seat is in the lower parts of the lateral region of the chest. It may become heaviest in the external region — or over the clavicles. It is generally confined to a limited portion of the chest and varies much in intensity. In its character it is cutting, is increased by pressure — movement, and deep inspiration. When oppression takes place, it disappears, the signs of the pleura being no longer in evidence.

(b) Respiration. — is generally short, hurried, jerky. In mild cases, there may be little or no change in the breathing; in severe cases, the difficulty of breathing may be felt.
Ammoniacal vein to vomiting. This ordinary occurs when this plaury is double. Unitaly effusion causes a change for the better in the respiration—its being now neither so short nor hurried, from intermission or remission of the pain. As wants naturally be expectorant the respiration movements are not so full as in health but they take place more frequently.

(c) Cough. Generally, expectol may be obtained. When present the case uncomplicated it is not full but short and dry. Of Branchitis or Pneumonia there cannot be any expectoration.

(d) Position of the patient. Varies in general with the stage of the disease. When pain still exists, effusion not yet occurred, the patient lies on the unaffected side or back. But after effusion has occurred the position is changed to the affected side. Though, in most instances, there are the positions adopted, there are exceptional cases where the patient lies on the affected side in the day stages and unafflicted one in the oppressive stage. In other, again the position would been a matter of indifference.

General Symptoms.

These are petrile in character—

At first there is a sensation of cold followed by

In one, then we have a sensation of heat and—
any intense heat. The skin is hot & dry in the
plastic stage, but moist when effusion takes
place. The fever is intense. The pulse is frequent,
short & not easily compressed — at least in persons
whose health was previously good. In persons
of a debilitated constitutions, it may be slow —
I easily compressed. The hands are emaciated
& appetite bad. The urine is putrid in character,
It is frequent in diminished amount — is of increased
density, dark in colour & possesses a peculiar
lemon odour. The chlorella are normal as a
general rule.
Physical Signs.

1. Inspection.
The respiratory movement on the affected
side is rapid & slightly jerking in the dry type. Its
character are much the same in the plastic stage.
When effusion takes place the movement is no
longer jerking, but becomes still more rapid —
so may be imperceptible — especially in the
case of the lower joints of the knees. The
Condition of the subcutaneous spaces varies with the
amount of effusion. In the dry & plastic
stage, there is no notable change. In the effusive
stage, they are obliterated or may be cyanotic.
They may also show some amount of redness of the
particulate.
Measurature. In the 1st two stages of the disease, the measurement is the same as in health. In the feverish stage, the affected side may or may not be distinguished, according to circumstances.

Palpation. In the dry stage, there is diminished respiratory moment and slight friction may be felt. The vocal thrills are normal. In the pleural stage, there is still diminished respiratory moment, but the friction is now worse in character. In the effuse stage, there is marked resistance on pressure, with a feeling of fluctuation. Respiratory moment is still more feebly or is only be altogether absent. The friction is to be felt in all. The vocal thrill is much lessened or not to be felt as usual. In the effuse stage, the friction is even more pronounced, or becomes more distant, and the upper parts of the chest and the lung is compressed and compressed as the upper parts. Then the vocal thrill is increased in the latter situation.

Percussion.

In the dry stage, the resonance is normal. In the pleural stage, there is no change - or should there is dulness and very slight. In the effuse stage, however, we have distinct dulness and with this an increased sense of resistance to the fingers. The percussive may be by percussion under the clavicle.

Auscultation. In the 1st stage, there may be friction in the lungs. In the pleural stage, the
fuction made is generally hard to discover. The
lesser this sound is reduced to, the more of these
stages. Branching branches forms the place of
The lesser this sound is in the opening stage. It
may as may not be heard at all parts. It
is generally to the famous point of view of the
up in front. Wherever found it is always obvious
in character. Should the opening be compared to
the lower part of the area, the opening is found
towards the open. The opening on the unappealing
side possesses the same character. At least if
the opening is not all compoundable, Argophony is
must heard generally just before the area of the

When attachment is determined by characteristics,
changes occur in the marked degree. These changes differ,
they materially according as the diminution in the
size of the affected side goes on to reduction as
stops short us the point when the area acquires
its natural contour. In the latter case there is
a gradual clocks with in all the marked degree till
the normal standard is reached. The abnormal
distension of the area disappears - the intercostal
depressions become familiar palpable. Again
there is resonance or stenosis - In the axial position
we have the return of local resonance. The
lesser sound in the more becomes available.

as the supercototated approach passes away. The tube
une space equally in both sides.
But if retraction takes place we have
a different order of things. A variable amount of
distortion occurs. Lateral curvature of the spine
and displacement of the apex are produced, while
the ribs are approximated, and the interspaces nar-
rowed. Redux friction may heard. As the venous
murmur is still audible as the heart. There is
dullness on percussion as the liver. Heart rate in-
Prognosis.

Pleurisy generally makes rapid progress. But there are exceptional cases in which it advances very slowly. In most cases progress and duration vary much with the treatment. A slight attack properly treated runs its course pretty rapidly—10-20 days may be accepted as the limit of its duration. In severe cases a much greater time elapses before the disease can be arrested. However, no matter how acute the attack may be, if the constitution is good, the termination is favourable. In a healthy constitution, where there is no latent organic disease existing, and where the pleurisy is not accompanied with any diaphoretic, or a predisposing cause, the termination is generally in resolution. If on the other hand the general health is below par, from whatever cause arising, there is a great tendency for the affection to assume the chronic type. Under any circumstances, death is not common, e. g. it is not common the immediate cause of death.

While in pure primary idiopathic pleurisy a fatal issue is exceedingly rare, T. Meehan says that so rare is it that he has only met with one case. The same author further states that even where chronic disease of the lung or of other organs precedes, a fatal termination is unusual. It is rare for the immediate cause of death when complicated with pleurisy or chronic internal pleurisy. Pleurisy when set up as a secondary affection in the course of Caro—some syphilis theories and its contacts is most liable to
terminal fatal. What is to be dreaded in most cases, is the recurrence of any of those secondary conditions, which may put life in peril, or at least, render it precarious. Thus when the left-pleura is the seat of the affection, a considerable amount of effusion is produced, and there is the liability of great displacements of the heart, which may not again become to assume its normal state, may be set up.

As indicating a favourable turn to the disease, a crisis does occur, though not so marked as in other cases, and not exactly on the same critical day or indications of crisis will be found in the urine, among other changes. Thus as an advance is about to be made in a favourable direction, the urine becomes of increased density, a copious deposit of lithuric tars place in a few days or days together. At the time that this takes place there is a desquamation of all the general and local symptoms. Amongst the latter, the cutaneous eruption somewhat scarce in character is a sign of good

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Treatment

The treatment of acute phlegmon is simple. It is to be conducted according to the gouty laws drawn up for the treatment of inflammatory affections in general. The stimuli are few, but the principles upon which they are worked with are limited. Of course the indications are the same here as in other inflammations. But the peculiarities of the latter incite the physician to a corresponding modification of the remedies to be employed. Here the danger is not great—very rare degree rather than of high. Precaution is to be given to some remedies while others, which otherwise might have seemed of equal or even greater value in some affections, are to be reserved as of minor importance or used more as adjuvants. Not only is this modification of general principles necessary to meet the exigencies of the disease here, but a further direction has to be made, according as the disease case may be of the acute or chronic type. The indications of treatment are to arrest or control the disease, to induce absorption and to keep up the general health. To fulfil these indications various remedial agents are pressed into service. These we will now turn to a little in detail.

Blood-letting.

To enter into the merits of the arguments used for and against blood-letting in inflammations would be to go quite beyond our province in this controversial work.
has been said on both sides. With us the question assumes
narrow limits. The point to be considered is its ap-
propriateness to acute pleurisy. I think there can be
little doubt that cases may present themselves where
the abstraction of blood is the general effect of treat-
ment and as such ought to do harm. Thus if a case of
acute pleurisy presents itself from the first the character
of the anthrax type we have no grounds for hoping
that any good results can accrue from that practice.
quite the reverse rather. It would only increase the
risk of a tedious recovery or even of a fatal terminating
outcome when we have the disease established during the
progress of pleurisy of the lung the practice is manifestly
unproper. Though general blood letting may be
admissible in some cases, in others it may be presum-
ably unwise with the best founded hopes of success. It tends
to arrest inflammatory action while as long as two of the
most distressing symptoms are removed or relieved this
pain and difficulty of breathing. Of course the cases must
always be carefully selected by the practitioners to
take an early stage of the disease. As to the amount of
we have to take our cue from the condition of the
patient the amount to be taken being directly proportioned
to the strength of the acuteness of the case. For though
it may be better borne and more tolerable in pleurisy
than in diseases of the membranes of the parenchyma
because there is a more considerable exudation.
matter to extremes. Further, though cases may arise where general bleeding is contraindicated, there may be other cases where local depletion will not be followed by further lesions. In many cases it is all the physician has to depend upon. As where tubercle of the lung enters as a complication. At other times it may be quite proper to address iband rent generally. Hence—this wants he done where the type is otherwise the patient general health pass. The pain patient. Indeed in many cases the judicious administration of blains along with Kahlskum 

2. Autonomy. 

Autonomy is not so well adapted for pleurisy as pneumonia. Dullness in the latter disease its administration has been attended with the happiest results in many cases. There are some medical men who do not subscribe to this; it is true, but a greater one recognize the benefit to be derived from it. However some of those who deem it perfectly admirable in pneumonia are rather sceptical as to its great efficacy in pleurisy. While others hold that it is equally efficacious in both. The Dr. say thus inactivating as a sedative in lowering the action of the heart & pulse, it acts in a remarkable degree in arresting the local inflammation & reduces a marked diminution of the severity of the local symptoms. At all events whatever may be
the state of opinion as to its effects in acute poliomyelitis, men are almost as one as to its advantages in puerperal complications with pneumonia or bronchitis - especially of the diseases of the uterine type. As to the mode of administration, there is a slight discrepancy of opinion here also. While some allege that the greatest good is obtained when it is employed as a contra-alimentant, others maintain that its influence, as such, is not so great as to act as a Frenseating dejection to the deep system. As a contra-alimentant it is usual to give 1 to 2 or 3 g. every hour or every 2 hours. Such doses in the healthy state either induce nausea and constipation, or when employed in re-establishing the disease are generally obtained the therapeutic action without the physiological effects being produced. It lowers the pulse very perceptibly and tends to arrest the local inflammation. The may also increase the tolerance as the rectal, nausea being erective, but after the 2 or 3 dose the effects of therapeutic effects are to be observed. This contra-alimentant power of the drug may be called into play alone or as an adjournant to blood-litter, i.e., according to some practitioners to counteract Arnica and blood-litter; mixed up on each other so as to become less efficacious - i.e., when both are employed at the same time so it is stated or lacrums.

When Arnica is exhibited its effects are to be carefully watched. For though no symptoms may be
Produces, there may be a diarrhoea set up extinguishing
the patient strength & rendering his convalescence tortuous.
Indeed in some the intolerance of the remedy is so
great—tho’ nausea & vomiting returning so alarming
as to cause the physician to abate its administration.
But this is not as all common. The addition of
a little opium generally suffices to cull the trouble.
Should this fail them by suspending the remedy for a
little while the vomiting is, this nature attendant effect
may be evolved minus the nausea. Should this plan also
prove abortive then by increasing the dose the desired
results may be obtained.

As already stated, the power of acting as a
nauseating gastroscopic, over local inflammation is said
by some to be very great. Going upon this, they give
in doses of from \(\frac{1}{2}\) to \(\frac{1}{2}\) gr. every 2, 3 or 4th hour. When
so administered nausea is kept up for a long time
while there is little or no vomiting. One diarrhoea
generally accompanied
Diaphoresis is its action as a nauseant. This appetite
action is said to be of great efficacy especially in
the advanced stage of the disease.


In pleurisy Mercury is a means very
powerful for good. This is usually at all times
be given without caution & the patient carefully looked
after through the whole period of its administration.
When judiciously given, it provokes a regular perspiration.
by preventing oppression or, should that be impossible, by promoting absorption. Simultaneously with blood-letting.

Now, when such is admissible, we give the system under the influence of the drug, to this we apply a poultice.

Prepare lukewarm in order to draw full benefit from it. Whenever the system shows signs of being touched we must suspend the doses till the development of the therapeutic action. For when we touch the treatment, like for here, as we decline, we may weaken the patient's strength, increase the liability to the chronic form, when otherwise he might have been treated over it. The mercury is generally given in the form of Calomel along with opium. The opium is antipathetic, purgative, it's a

1. Prevents the mercury from passing off by the bowels & being given rise to intestinal irritation & diarrhoea.

The latter is no small point gained where so much depends on strengths of constitution, as the disease advances. Another way to produce the effects of this mineral is by instillation. By instilling the

2. medicines we produce its action much more speedily. As it is difficult to bring children under its influence, instillation is the proper method in them. Should the acute symptoms of the disease have passed, the same scheme, plan and may be continued. The cure is, though more protracted, may still be satisfactory. On the other hand we must
avoid interfering too much with nature - in many cases the excretion can be removed by her remedial powers alone.

6. Counter-irritation.

If the patient is seen at the very onset of the disease - before it is thoroughly established - then we may apply counter-irritation with reasonable hopes of aborting the disease or at least rendering its duration much shorter than it would otherwise have been. Of course we would conjure with such local measures the constitutional agents already mentioned. But the patient is often not been sufficiently sick or the disease is too extensive to be amenable to such treatment. When such is the case - when the local symptoms are well marked & fulminating action set up we must lay aside these & treat the acute symptoms alone.

If they are cured in this manner, they may increase the severity of the local symptoms or make the constitutional ones worse. So that for practical purposes the period for the application of these means of cure is limited to the latter stage of the disease. When there is a decided declension of the constitutional symptoms. It is then that they are ineffectually. Various forms of counter-irritation may be used. Superficial ones are good. Tapping is very effective. Acupuncture is generally attended with excellent results. Among other good effects they relieve the pain greatly. In children these are the only 2 forms of counter-irritation.
which should be applied. In them, it is sometimes a matter of some difficulty to regulate the action of Castor Oil, because they are apt to cause ulceration in spite of the greatest care on the part of the attendant. This may go on to blanching—a most unfortunate result—as there is not a chance to throw away. Even in cacti, the castor oil has its disadvantages, none of which is as likely to fulfill the object we have in view. It is applied either in the form of emulsion or ointment. In the latter, from podia is used along with A - V so that on this account may be preferable to the former. Tartar emetic ointment is also good in that. Again, some are nauseous, others no nausea. There are very many.

5. Diuretics.

To assist in the removal of effused matter, diuretics are given. For this purpose, the salts of Potash are perhaps the best. The Carbonate acetate and nitrate appear to be in greatest use. Their action is denoted by marked increase in the diuresis as well as in the fluid parts of the urine, thus they may be given separately, or combined. Sometimes when given separately, their action is not so decided.
as might be desired—but on examining them they were
very apparent. The relief of pain may also be
beneath the use of other remedies, as quinine...Perhaps the best method is to give quinine blue or
pulvis ant. The relief of pain during the day
will be found very remarkable.

6. Perpetuities

The bundles of reserve are to be attended to
Care being taken that they are kept space. Some
do and stop here; but perhaps the best is to
displace to some extent to some extent...agrees to the other remedies.

But the rule of this practice seems well
doubtful. Great depression is apt to be induced.

Leukocytosis may be as suppressors decidedly less
indicated. Besides we have other remedies which
are not followed by such depression as the result of
exhausting disease.

1. Diaphoretics

These may also contribute to bring about
a favourable termination. But in all these the jeline
and a secondary part in the treatment of the appe-

8. Prelude of Potassium

Has been much praised for its cor-
as hastening absorption. In some cases it appears
to have been useful in diminishing the amount of flux
So that, according to all accounts, it would seem to be an incurable in its action.

Diet.

During the whole progress of the disease, much attention should be paid to the condition of the general health.rone might be given. The preparation of iron or the mineral acids. The food should be nutritive but non stimulant. At the same time the patient wants as well to abstain as much as possible from fluids.

Paracentesis Thorax.

When the question of operation comes to be considered, pleurisy has generally lost many of its character as an acute affection. It assumes more the chronic type so that it may as just after appear somewhat out of place to take up paracentesis. Still, to complete the description of treatment, we may bring it up. There are few from being agreed on the propriety of the operation. But it does appear on reference to statistics that the number of successful cases is sufficiently great to justify the operation and that in all severe cases. The latter assertion must however be made with a limitation. It should be performed when the oppression is great and attended with dyspnoea amounting to orthopnoea—when life is threatened and all ordinary means to arrest a fatal termination.
Where there is a clear case of a thoracic abscess, it is the duty of the medical man to perform the operation and give his patient a chance of recovery. In cases of abscess effusion where the symptoms are not urgent and the danger of death imminent, less severe measures should be taken. The existing symptoms should always be well noted, for while on the one hand, destroy perseverance in a comparatively mild form of treatment may bring the case to a successful conclusion, on the other hand treatment may lead to total failure if the proper time for operation passes by. The best time for operation is the great point to be determined. When the operation is delayed to an advanced stage of the disease, it is often injurious, but when considered, early performed, it seems most successful. No definite period can be fixed for our indications of treatment, according to Dr. Walsh's we must learn to the whole history of the case, as well as to the existing local and constitutional states. The rule that Dr. Walsh has laid down for the performance of the operation is: 'that the time for operation has come when a connection is imperceptible by medical means, and it either increases or non-absorption of the fluid.'

The nature of the fluid has an important bearing on the success of the operation. There can be no doubt that it is more successful when the
This is severe or zero-albuminous than when it is purulent. But even when it is purulent the amount considerable too, the termination may be favourable. Cases are not uncommon where complete recovery took place under such circumstances. Age also influences the success of the operation & according to Wallace the practice of the time - the results being better when the operation was done the deeper earlier, when it was done the right. When we have any of the deathlike state, formerly mentioned, concerning the issue is very doubtful. We might be warranted in giving a favourable prognosis when the patient is young, his constitution not much weakened by this or any previously existing disease, when there is some of the deathlike state apparent, when the suppuration is not very great in amount, when it is zero-albuminous rather than purulent & when it has not existed for such a time as to render the subsequent appearance of the compression less a matter of doubt. But the prognosis should at all times be guarded for cases have turned out unfavourably when every thing appeared to be going well.

As to the methods of pressure, numerous plans have been recommended. 1) Dr. Keyham has revived an old method in use in the time of Hippocrates. He proposed to perforate a fist with a trephine. The aperture may form a tube about 1/4 of an
...cause & allow the fluid to drain off more com-
pletely. Against this, however, we must
note, the risk of cancer or oesophageal injury by such
a procedure, M. Payr has operated in this
way on one patient. It was successful—but
this one instance cannot be taken as a criterion.

(2) Another method proposed is to make an
opening by the cautery or potassium caustic—but
this is so uncertainly objectionable that it may
as well be left out of consideration.

(3) The most approved plan is to perforate the
pleura of the chest by means of a trocar & cannula
& draw off the fluids. (a) As to the position of the patient
he should be placed on a table or couch, forward
to the edge of his bed & made to lie his body so
as to render the affected side as prominent as possible.
(b) The site. The lateral region is of course
chosen— but we require still narrower limits of
down
hour than the 5th or 6th rib. The opening made
must afford a convenient outlet for the fluids. De-

...can not be drawn any lower for fear of injuring the
diaphragm nor. The best situation is between the 5th & 6th
 ribs on the right side—or the left side—if well
to go a little lower, to avoid the pericardium between
the 6th & 7th ribs. To avoid injury to the intercostal
vessels, it is necessary to go in the medullary space
one of the intercostal spaces within...
and at a point equidistant between the sternum
and the spine. In determining the point where the per-
foration is to be made, any adhesions of the lung to
the chest has to be removed. It may be well to make
out the nature of the pleur before introducing the knife
this may be done by an exploring needle. It is
however deemed quite unnecessary by some. Some
also make a preliminary incision with a tenotomy
knife. There seems some little necessity for this, if
the trocar is in good order. In children, best if
the latter measures should be kept unless an accidental point is up to render the child trouble-
some when the pleur is being drained off. Chloro-
pro in all cases may be dispensed with as it used
might lead to serious danger. The current
having been introduced care must be taken that
air is not allowed to enter. The admission of a
small amount of air, is not to be regarded as a
source of great danger but is ought to be avoided
as much as possible. It also becomes a question
as well as to the fluid and the pleur should be evacuated
completely as well as by successive drainings. T. Walsh.

He thinks that if the patient is as dejectitude as to
justify an apprehension that the complete discharge
of the liquid might be followed a dangerous syncope.
It is advisable to withdraw the fluid gradually. All
other cases of the fluid can be withdrawn evi-
Decide on the better: Another point which is given
rise to some slight difference of opinion is - Should
the wound be closed after the operation? When the
fluid is otherwise than purulent it should be closed.
For, complete evacuation having been effected, there
is nothing to be gained by keeping it open - even if there
is still some fluid remaining, the admission of air
is apt to render it purulent. When the exclusion
is purulent the opening may be closed so as, according
to some authorities.

After operation the question naturally arises - What is the probable result? It may be
one of several things - (1) Complete cure. (2) There may be
constant secretion of fluid from the pleura - by yourself
it may remain so - a very rare event however. The
more usual course of things in such a case is for the
fluid to become purulent or sero-purulent. So that
there may be a permanent sepsis even established, with
or without an fistulous opening. This would appear to
be a frequent sequence of the operation. (3) Pneumo-
thorax - the ordinary result in the majority of cases.
(4) Death through the influence of the operation - a
rare termination.