Remarks on Pneumonia

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"Stat super vias antiquas, et video quanam sit via recta et bona, et ambulabo in ea."

"As young men, when they knit & shape perfectly, do seldom grow to a farther stature: so knowledge, while it is in aphorisms and observations, it is in growth; but when it once is comprehended in exact methods, it may pereance be further polished and illustrated, and accommodated for use and practice."

Bacon's advancement of learning P12.
The subject which I have chosen for my Thesis, is certainly not a new one, many men of great ability, learning & research, have in all ages been endeavoring to ascertain the best method of treating that class of diseases to which the term inflammation is applied; and inflammation of the particular organ, the Lung, has perhaps been treated of as often as that of any tissue or organ in the body; still we see men of eminence of the present day advocating different modes of treatment for this disease; and it is in the hope of being able to show why it is they differ, & to explain some of the apparent contradictions which we so frequently meet with on this subject, that I have chosen it as the subject of this Thesis. I have done so the more readily because I have seen many cases prove fatal which I think might have been saved, had a more energetic plan of treatment been adopted. I do not flatter myself, that I shall be able to propose any plan of treatment, by which Pneumonia may be always successfully combated, indeed I have no new plan to bring forward; but I hope to be able to point out
some of the differences which exist in the cases themselves, differences which necessarily require a modification of any particular plan of treatment to suit each individual case; such as those of temperament, habits of life, occupation &c. of the patients; but there are many others to which I hope to allude in the course of time and to all these, most attention be paid, if we wish to base our treatment upon rational grounds.

In the first place, I propose to consider upon what grounds we may predicate the existence of Pneumonia, in fact its Diagnosis. A correct diagnosis is of the utmost importance, for, without that, any method or plan of treatment which may have by chance proved successful in one case, cannot with any certainty be used in another, because we do not know whether it is the same disease or some other, which we have to treat. In founding our diagnosis we must be particularly careful to take the general symptoms into account, as well as the Physical signs, for I believe there are several varieties
of Pneumonia, and that they are chiefly to be diagnosed by their symptoms. I mean to say that the physical signs being the same in all these cases, the rational signs, may be so different, as to warrant a division of these into classes or varieties of Pneumonia, according to the symptoms which they present. The older Physicians had much less facility afforded them for the diagnosis of this disease, than we have in the present day. The discovery of Auscultation & percussion has rendered the physical diagnosis a matter of comparative ease, and I am afraid that this facility in ascertaining the physical state of the Lung, has led many young practitioners to pay too little attention to the symptoms which accompany that state, but there must not be overlooked if the Physician wish to cure his patient.

What are the rational symptoms of Pneumonia? Fever, pain in some part of the chest, accelerated sometimes oppressed breathing, cough with expectoration of a viscid rusty solution.

These may be all present, but they are not always bad when they are, they may much in degree, in different cases. We will speak first
of the Dyspnea, as it is often the most striking symptom. It differs much in degree in different cases, and at different periods or stages of the disease. It is sometimes excessive from the first, causing the patient to sit up and gasp for breath; the Respiration in a given time are increased, amounting sometimes to between 100 to 30 in the minute. Sometimes the patient is not sensible of the dyspnea and it is only manifested by the increased frequency of the Respiratory act, and by the occurrence of pauses between the words of the patient, while speaking. It differs also in duration; in some cases lasting throughout the disease and part of convalescence, in other rapidly disappearing under the use of the proper remedies.

The amount of dyspnea does not at the beginning of the Disease, depend upon the amount of davy substance involved in the inflammation, but rather upon the seat of the inflammation, thus it is generally greatest when it attacks the apex or Root of the lung, and the amount of serious irritability may have much to do with the production of dyspnea at this stage.

But in the 9th stage, the amount of dyspnea is generally increased by the presence of the excudation matter within the lung.
and by whatever tends to prevent the expansion of the lungs; thus, pressure of the diaphragm upwards by pregnancy, ovarian tumours, enlargement of liver, spleen, &c. prepare on the lung of the opposite side to that on which the pneumonia exists, by pleuritic effusion. Pericarditic effusion can cause most urgent distress; if any of them occur in conjunction with pneumonia.

When the base of one lung only is attacked, some persons, who, in ordinary circumstances, seem not to require the whole of their lungs to respiration, feel little or no dyspnoea.

Pain, more or less, in some part of the chest is generally present; it is of a dull, heavy character, a sensation of heat & weight within the chest; when the disease is complicated with pleurisy, the pain is like that which occurs in simple pleurisy, sharp, stinging, increased by respiration, especially by the cough. This I have always found to be the case, when I have had an opportunity of ascertaining the state of parts after death; as well as of observing the symptoms during life. Cough is almost always present and generally
The expectoration in acute bronchitis very closely resembled the purty expectorated spoken of, in some exceptional cases. May not pneumonia, to such an amount as not to be physically appreciable, exist in these cases?
is severe, but it may be so slight as scarcely to excite obstruction, especially in latent pneumonia.

The cough is followed by expectoration of a thick, green, rusty character, very characteristic. I have held it to be pathognomonic of this disease, I believe it is so when its character are well marked, when it is thick, mucoid, adheres to the roof or back of the bed, and according to the quantity of blood mixed with the fibrous mucous secretion, assumes various shades of color, from yellowish green, to bright red. It does not, however, always present these characters, sometimes, it is simply bronchitic, and in some rare cases there is none at all.

The fever. Upon the character of the fever depends our diagnosis as to whether the disease is acute or chronic.

The pulse is said by many authors not to be a good guide in this disease, as in many others; this may be true, but as it one of the items which go to make up the phenomena, to which we attach the name of fever, and as there can be no fever without a quick pulse, it is probable
that they mean that its character with regard to frequency, hardness or its not constant. In some cases it is generally quick, sharp, tolerably persisting, and sometime full; in the case of a young woman named Blair who was admitted into Ward 13 of the Royal Infirmary, under the care of Dr. Robertson during the Christmas holidays, the pulse was 130, absolutely bounding, and almost uncompressible. She was pregnant but had no obscure of the heart. Of these characters do not last long, the pulse soon becomes weak or small though it retains its quickness with some degree of sharpness. Sometimes it is small weak from the commencement.

Heat & dryness of the skin are commonly great, the face flushed, sometimes only on one side, but this does not seem to be of any diagnostic value in determining the side on which the inflammation exists. Sometimes the face is pale, the lips pale almost bloodless and the skin heated in cold perspiration. There is commonly much thirst, when there is much heat & dryness of the skin, but I have not remarked that it is excessive under other circumstances. The tongue may be clean, but it is generally slightly
coated with white fur. The papilla fungiformes standing out prominently in the form of little dull points, especially near the tip of the tongue. Sometimes it is much coated with brown fur in the centre, the edges of the remaining bright red. This is generally the case when there is much gastric enteric disturbance.

When pain commences in the chest there is often vomiting. Sometimes, sometimes, there is constipation, but in others the bowels act normally. There is commonly some headache, but it is not a prominent symptom in most cases. Delirium sometimes occurs and it is a very bad sign. I have never seen it but once, and that once in the case of my own sister, who a fortnight after delivery was attacked with Pneumonia. I died on the 7th day after the attack. Delirium came on only a few hours before death.

Physical Signs

These vary according to the stage of disease. Lacunae divided Pneumonia into 3 stages taking first motion appearance as the basis of such division. D. Stokes thinks that evidence is obtained by auscultation of a stage in the disease earlier than
that which Laennec calls the first stage, and which is manifested by the occurrence of crepitation. I shall henceforth use the ordinary language employed in treating of Pneumonia as that used by Laennec. Then, during the stage that of-engagement of the ear, aided or unaided, by the stethoscope is applied to the chest of a patient suffering from Pneumonia, a fine, crackling sound is heard accompanying the Inspiratory murmur. It consists of a number of exceedingly minute crackles of equal size rapidly and equally evolved in puffs, occurring only in Inspiration. At first these sounds are heard accompanying the ordinary vesicular murmur, but as the disease proceeds both right and left of the vesicular murmur is heard, and then the respi- tant rhonchus is heard alone. After lasting for a time or half lengthened period, the Rhonchus respi-tant can only be brought out by a very deep Inspiration, after coughing for instance, and then it is lost altogether and is the spot where it had been heard, another phenomenon, that of the Bronchial Respiration presents itself. It is that the change from crepitation to Bronchial breathing is abrupt, for very commonly a prolonged loud Inspiratory murmur...
is heard in the same spot where during Inspiration Crepitation only is heard.
This rhonchus is said by most preceptors to be limited to Inspiration but some others aver
that it occurs in Expiration also, and these latter say that it is heard not only in Pneumonia
but also in Pulmonary Abscess, Emphysema of the Lungs, whilst the former hold the opinions
of Laennec and say that it is heard in Pneumonia alone. I think Laennec those who follow
him are right in that there is a true crepi
tant rhonchus, heard only during Inspiration,
which is pathognomonic of Pneumonia in its
first stage, but must at the same time confess,
that it is sometimes difficult to distinguish
the subacute, from the crepitant rhonchus.
The mechanism of the production of this sound
has been a matter of dispute among the learned.
Some as Laennec stated, by attributing it to
the passage of air among fluid in the air cells.
Others as Dr. Gregory Williams supposing that
there is no fluid in the air cells beside the
secretion of the mucous membrane, and
that the calibre of the ultimate bronchia, and
air cells being narrowed by the pressure of
interstitially exuded liquid, and the interior of the former filled up with viscid secretion. The air can only pass through this secretion, in successive bubbles. This bubbling of air through a viscid liquid, contained in tubes of equally diminished caliber, gives rise to the regular & equable Bronchus respiration.

Dr. Walker states his opinion thus: "It seems most probable that the phenomenon occurs in the parenchyma of the Lung itself, especially in those portions of it immediately contiguous to, and actually forming the walls of, the ultimate terminations of the Bronchi; and that its physical cause is the sudden & forcible expansion of that parenchyma, glued together, as it were, by the viscid exudation with which it is infiltrated. Each single crepitation would thus signify the expansion of a bell, and be produced by the unfolding of surrounding glomeruli to the necessary for that expansion."

The objections to Dr. Gregory's theory are: 1. That we have no proof that the viscid secretion exists at the seat of the inflammation. 2. That it has been proved by Hithal that the bubbles produced by the passage of air through viscid liquids become more & more unlike the crepitant tone, as the viscosity
increased. The first objection applies also to Dr. Webbe's theory, post mortem examining death from the existence of viscid exudates gluing the air-cells together in the lungs of persons who have died during the initial stage of pneumonia. I believe most persons are inclined to agree with Laennec's explanation of the production of this phenomenon and that it is really owing to the presence of fluid in the last bronchiole and that the air passing through this fluid gives rise to the formation of bubbles on the surface of the fluid next to the air-cells, they burst into the residual air contained in the cells and thus we have the Phænomenon produced. The reason why the fluid is not expectorated I apprehend is that it is retained in the smaller tubes by capillary attraction.

On referring again to Laennec I find that he says, "we at once recognize the presence in the air-cells of a fluid of the consistency of water, by which the entry of the air into them is not prevented." I cannot imagine how air is to pass into the cells of a lobe, at the Base of the lung, if these cells are already filled with liquid, for the cause of the entry of air into them during inspiration and the excretion of their residual air is then entirely removed.
Unless resolution take place the 1st stage passes into the second, that of Repetition, and we have further physical signs. The natural vesicular murmur is not heard at all in this stage, and where Crepitation was heard in the preceding stage, we now hear what is called Bronchial Respiration, which is an exaggeration of what we hear in health at the base of the sternum or between the Spines of the Scapula. The Respiration sounds hollow, tubular, of much louder than the natural vesicular breathing. Inspiration Inspiration are separated from each other, and the latter is longer than in health; generally as long or longer than Inspiration, and gives the idea of air flowing along a solid tube.

The vocal resonance, is increased over a consolidated lung, provided the Bronchial tubes remain open. The patient seems to speak from the chest, and the voice rings in the ear quite unpleasantly, but it does not seem to originate within the stethoscope, nor is it heard in distinct words, as in perfect Pneumology. Sometimes you hear the words spoken by the mouth first & then immediately after, hear them repeated distinctly from within the chest: whiffs of the Bronchial respiration...
sometimes alternate with these sounds. Bronchophony is not always present, at all times, in the same spot, the condition of the lung being the same, but when once it has been established it can generally be obtained by making the patient cough & expectorate the mucus which blocks up the bronchus leading to the part. Bronchophony is heard when the bronchial tubes, feeding into the leprous parts, are filled with air and it disappears when they are filled with fluids (sputum) Leewen attributed the occurrence of Bronchophony in leprousisation of the lung, to the increased conducting power of the involved tissues. Pitha says that if this were the case we ought to have the resonance of the voice increased, as well when the bronchial tubes are filled with fluid as when they contain air; that in pleuritic effusion the voice becomes weaker as the fluid increases. If the lung gets more solid, the reverse of which ought to happen, if the effusion were a better conductor of sound. He states that after many experiments on healthy leprousized lungs removed from the body, he had come to the conclusion that: 'Vibration in the strength of the thoracic voice cannot be explained by difference in the sound conducting power of normal
and abnormal lung parenchyma; and proceed to state his belief that the increase in the strength and clearness of the thoracic voice, is owing to consonance of the air contained in the trachea bronchial tubes with the original sounds of the larynx, and of the consonant sounds of the throat (mouth & nose), the air in the trachea bronchial tubes combines with the voice in so far as the walls confining it, have, in respect of their power of reflecting sound, a similar or analogous condition to the walls of the larynx & the thorax & nasal cavities; as the bronchial tubes pass into the parenchyma of the lungs, they gradually lose some of their cartilaginous structure and the consonance of the voice is consequently much feebler in them than in the trachea but suppose them to be surrounded by lung tissue deprived of air & then you have a condition more nearly approaching to that of the walls of the trachea and the walls of the bronchial tubes will reflect sound more strongly than in their normal condition. The reflection of the sound (the force of its consonance being greater or less according to the density of the parenchyma). Dr. Wilde thinks that the increase of the vocal resonance in a rehydrated lung is owing to reflection.
of the sound from the tubes surrounded by semi-solid material so as to give rise to echo. For my part I believe that the increase in the vocal resonance in a heated lung is owing to the greater homogeneity of air and the closer approximation of it to the walls of the chest, and of the bronchial tubes, that in fact the solidified lung acts as a continuation or prolongation of the stethoscope, and enables the auscultator to hear the vibrations of the walls of the bronchial tubes and their contained air, as if the stethoscope were placed on the tubes themselves. The vibrations of the walls and their contained air are increased on account of the blocking up of the air cells (smaller bronchi), which prevents the diffusion of the sound.

The varying density of healthy lung tissue, and the difficulty with which sound passes out of one medium of different densities, I think explains sufficiently why only a confused hinnnying noise is heard, when a healthy person speaks, while we listen to his chest.

Palpation on percussion occurs as the consolidation advances, the note may become so dull, that the
affected side sounds when struck more like a piece of board, than the walls of the chest. The resistance felt by the auscultator, is also very great, when there is a great portion of the alveoli consolidated, but the thickness of the covering of the chest have a great deal to do with this. If the walls of the chest are thick & muscular, the resistance felt by the finger is greater, than when they are thin, although there be no consolidation beneath. If a portion of the lung, say the base, be alone affected, the percussion note is often clearer than natural at the apex, and when there is fluid, to a small amount even, effused in the same place, the percussion note is almost always of a resonant tympanitic character, at the apex of the same lung in front. (this was well marked in the case of the man left, see page 79) When there is but little consolidation of the lung, that deep secrete, the percussion note is not notably altered; the bronchial respiration under the same circumstances may not reach the surface exaggerated or greatly. Respiration alone being heard, and in such cases if we have not the characteristic expectoration, the diagnosis is somewhat difficult. A portion of employment lung over consolidated.
See Watton's case Page 4 of the Case - May 11.
parenchyma may give a somewhat symmetrical but very short, ruddy sound. 

The vocal fremitus is generally increased over the hepatic tissue provided the bronchial tubes are not obstructed, and this is sometimes a useful sign in diagnosis. Pneumonia from pleural and effusion, I have known one case in which it was increased in pleurisy with effusion, but in that case there were some thick adhesion, about 2 inches long between the pleura costata, the pleura covering the lung.

During this stage, the dyspnea the dyspnea generally increases; the patient cannot assume the recumbent posture but lies with his head and shoulders raised, generally on his back with an inclination to the affected side. The cough is generally troublesome and the expectoration difficult. The sputa tough, viscid, adhering to the bottom of the pelvis. The sputum may continue hot or dry, and the face flushed in some other cases, but generally the sputum is pale, and the lips slightly blent. The pulse quick, feeble or sometimes sharp. In small, the urine scanty. Thigh coloured sometimes slightly albuminised. There is sometimes a deposit of albumin, especially after the effusion
of the febrile symptoms.

If resolution do not take place the 3rd stage
that of septicemia, may come on; the physical signs generally remain nearly the same, as during the 2nd stage; dyspnea on percussion still continued, and Bronchial breathing. Sometimes there are some hard rales in the head.
The sputa become thick, greyish, and mixed with pus, but sometimes sputa very like those occur during the resolution from the 2nd stage of Bronchitis, and as the patient generally dies or becomes so weak that he cannot be examined with much care at this time, I have nothing more to say about the physical signs of the 3rd stage.

When the 2nd stage has lasted several days and no amelioration in the general condition of the patient has taken place, when the sputa become thinner mixed with pus, it especially if we hear a ruminant calf where before we had Bronchial RaspBronchophony, when the aspect of the patient changes, the skin becomes of a dryish color. The face drawn into rigid lines, the tongue dry and rough, and the mind has a tendency to wander. When these all occur together, we may be pretty sure that the 3rd stage has occurred.
The terminations of pneumonia are by Resolution
1st. By suppression or absorption (3rd stage).
2nd. By abscess or gangrene. If this state may become chronic pneumonia.

Of these the first two are the most common, the
second the least so, the 3rd intermediate.

If resolution from the 3rd stage occurs, expectoration
becomes more like expectoration mixed with the
natural vesicular murmur, until at last
it disappears altogether. Attention for the latter
is generally taken place in the symptoms, before any
change is perceptible in the physical signs.

Expectoration should occur after desiccation of the
lung. If there is great relief to the feeling of
the patient, often a critical discharge, catarrhal
deposit of globules with urine, expectoration or expectoration
in great quantity, and these discharges
vary in different epidemics. Thus the perspiration
loses its bulk character. A deep, clear breathing
is superseded by the harsher expectoration which
becomes mixed with the vesicular murmur,
then ceases altogether.

If an abscess should form, which is extremely rare
for the tendency of the inflammation is to terminate
in diffuse suppuration, it not to be limited by excitation and the


after partial evacuation, we get the physical signs of a cavity.
Gangrene is rare as a termination of pneumonia but sometimes the inflammation is so acute that it kills at once outright. It is best detected by the fatal odor of the breath, sometimes the sputa resemble dirty prune juice. The occurrence of this kind of expectoration can be a cause of bad cases.

Treatment

1st as to Blood Letting. There is great difference of opinion still upon this point, and until the subject is approached with greater impartiality, and the symptoms which the different cases present, are studied more carefully in reference to this mode of treatment, the question is not likely to be decided. The dispute is not at the present day between those who bleed to the verge of convulsions and those who advocate a moderate use of the lancet in this disease, but between the latter and those who cast away this powerful instrument altogether. To all who have carefully studied this disease, it must be clear, that there is a wide difference in cases, presenting the physical signs of pneumonia. 

1st as regards the strength, previous health, occupation,
residence in town or country, temperate habits or otherwise of the patients, who present these signs.

In the tendency which the disease itself has, at the time, to assume a chronic and dynamic form.

As to whether the disease occur primarily, or during the progress of some other disease.

To arrive at anything like a right conclusion on this point, all these things must be taken into account. Take a case of pneumonic occurring in a previously healthy man living in the country, bleed, and probably the man with ordinary care will get well. Take another case of pneumonia occurring in a cachectic inhabitant of a town, bleed this one, and you take away the little remaining strength which previous disease had imparted and have left him, and he sinks under the disease.

Difference in type of the disease at various periods calls for a different plan of treatment, according as the tendency of the disease is to depprex, especially the nervous system, or to excite inordinate vascular action. In the former case, there is a want of power, the tendency of the exudative matter is from a serous or exudative character; in the latter, there is increase...
power as shown by the rapidity with which the plastic excitability is heightened, as shown by the acute sensation of pain by the patient; the vascular excitement sometimes tremendous, to what treat cases so different in the same way would argue an amount of foetal life which is theory however plausible ought to make a man guilty of. In the latter case we require the aid of the most powerful antiphlogistics and of these blood-letting holds the first place and I believe that in really phlegmic cases such as am speaking about, it cannot be safely dispersed with, whilst if it be had recourse to in the former case it will, if sometimes does, hasten the patient's depilation.

When Rheumonia arises in the course of other diseases such as Heart Disease, Diabetes, the internal obstructions, hypertrophy of the valves, Bright's disease, Phthisis, when it is seldom or never phlegmic, seldom or never requires general blood-letting, but local depletion is often serviceable if the patient is not very weak. Rheumonia occurring in SCARLET fever, after haemorrhage, wounds or surgical operations must be treated according to the type which the disease assumes and for some years past the type has been divided.
Adynamie. In Typhus Typhoid pneumatic bleeding is generally inadmissible but in some of the other
Diseases, I believe it will sometimes save the life of the Patient.

From the foregoing reason it seems to me that these cases differ from each other so much
not only in degree but also in nature, that any absolute rules which may be laid down for
our guidance in the treatment of this disease must
be subject to so many exceptions, that the
rules themselves become of no value.

Now suppose a Hospital Physician in London,
Edinburgh, Paris or Vienna, treats every case of pneu-
monia which comes under his care, in the same
manner, what mode of treatment is likely to be
most successful? But that by blood letting I
think, because three fourths of his cases will be
such, that if not altogether adynamic, yet
approach so near to that form of the disease,
from previous hardship and heat, that they will
not bear blood letting. If this be true of
two of the Typhoidic cases, a fiction is it
true with regard to Pneumonia occurring concur-
rently with, or in the progress of certain other dis-
cases, which in great number, come under the care
of Hospital physicians—such as Bright's disease, Typhus fever, Pneumonia. Disease of the mitral valve (obstruction) with insufficiency of the left ventricle. In these cases there is already depression of the nervous system rather than heightened nervous energy, and it is rare that any peculiar excitement occurring in these diseases may not be easily controlled, by milder measures. In most of these diseases, there is a poison in the blood, producing the primary disease, and the elimination of this is perhaps the best mode of getting rid of the local effect which its presence has occasioned. In these cases fevers or in the prefebrile state, the disease is often unrecognized until a few hours before death. In some there is structural change, and in all the strength of the patient has been severely tested by the preceding disease. The physician practising in a large town or city therefore finds that blood-letting is useful in many cases, and is therefore rather too cautious sometimes, and does not use it when its valuable aid is required.

Thus the term of the circulatory, in a case of acute, diffuse Pneumonia:

Now suppose another physician practising in the
Country among a healthy rural population, following the course which he has seen adopted in towns, what will be the result? Again and again he sees, that the inflammation stops as if halted in its onward progress, and proves the destruction of the patient: he then tries bloodletting at the commencement of the formidable symptoms of the disease, and finds that then he can with ease control the disease in its course, and therefore he is too apt to use resection without only considering the class of cases in which it is likely to be of service. The one says that the patient will get a better chance for his life by being treated without resection: the other says the patient will die if you don't bleed; if however anomalous it may seem, they are both right in both ways, for that which is the rule in one practice is the exception in the other, which is what I am attempting to prove viz.: that no absolute rule can be laid down for the treatment of this disease by bloodletting, but that we must be chiefly guided by our judgement as to the propriety or impropiety of using this powerful agent by the type which the disease assumes or is at the
time accustomed to assume: I suppose that the different statements which we meet with as to the good or bad effects of general bloodletting, are to be reconciled by supposing that the authors of these statements have had different types of the disease to treat.

What these should induce us to have recourse to general bloodletting? If the patient be seen early during the 1st stage, if there be great heat of skin, flushed face, great thirst, flushed tongue, hard, quick, resisting Pulse, headache, great dyspnoea, cough, much pain in the chest, and a dry skin & scanty high closed urine, we ought to lose no time in checking the inflammatory fever and this can be done most quickly & surely by bloodletting & it is not safe to set it aside for other means which act more slowly.

Blood then should be taken from the arm in a full stream the patient (if he can) have no tendency to faint after the abstraction of but a very small quantity of blood, which is seldom the case in these phrenic cases, assuming the erect posture, or at least sitting up in bed, and it should be allowed to flow until a sensible effect is produced on the Pulse. Local bloodletting
By means of cupping, glasses or leeches over the seat of the inflammation, tend to relieve the congestion of the parts bordering on the seat of the inflammation. To continue the depurating effect of the general bloodletting, this then should be employed directly after the former and at the same time, the following or some such drugs should be given in order to prevent the recurrence of violent reaction.

19. Antimonii potassii arsenici gr. i
Acidi hydrocyanici æ. mii
Tinct. Camphora composite m. xv
Pulvis æ. u. 20.3 j. m. unce

If it is not cured within three hours, the dose of the Antimony should be increased to a grain and a half at the end of three hours, if there is any tendency in the Pulse to rise much above the natural standard, and if notwithstanding, it continue to rise, at the end of 6 hours after the first bleeding, this ought to be repeated, and it seldom happens that now the pulse, with the inflammatory fever be not effectually controlled by the Antimony.

The object to be obtained by producection should always be kept in view, when the question
arised as to the quantity it is necessary to take away; the quantity of blood to be taken away is that which will produce an effect on the pulse and this will vary according to the violence of the inflammation. It is found by experience that a person in a state of acute inflammatory fever may have a much larger quantity of blood than would suffice to produce syncope in the same person, under ordinary circumstances, without producing any approach to that state, and if no effect is produced on the heart's action, we shall not be able to subdue the fever; we must then bleed until that be accomplished, but we must not take away so much of the vital fluid as shall cause the heart to attempt to make up for the frequency of its contractions for the diminution of the quantity propelled. We therefore bleed from a large opening in a vein; for a much smaller quantity will suffice to produce an effect on the pulse, when that quantity is taken away quickly, than a large amount taken slowly. In cases in which there is insufficiency of the left ventricle, or when the arteries are rigid from deposit in their coats, we must be guided more by the effect produced on the feelings of the
patient than by the state of the pulse, for in
the former case, the heart is more forcible, in the
cut-off, the arteries yield less easily under pressure
than ordinary. From 3 XV to 3 XX taken in
a full stream from a large opening in the vein
will generally be found to effect the object
in cases, and then if from 3 XVIII to 3 X. The taken
from the part by clipping and artery in the
manner I stated above, be given at the same
time, we shall I think seldom require to have
 recourse again to the Lanceet, but if the
artery should not be sufficient to keep quiet
the action of the heart we must bleed again, this
time some 3 XVIII to 3 X will generally suffice.
This is the treatment which has been found
so be most successful, in controlling really
aphric Pneumonia, and I believe it to be
the proper & rational mode of treating this
disease, when we get it in the 1st stage.
But generally the disease has advanced to
the 2nd stage. Is it proper to let blood from
the arm when the disease first comes under our
notice in this stage? Yes, if the disease is really
aphric, for then more & more of the lungs continue
to be attacked, and although part has been consolidated,
yet there is some part still in the 1st stage
and although by bleeding we cannot remove
the exudation matter from the consolidated
dung, yet we can prevent in a great measure
any further exudation taking place from the
basal of the parts approximated to those in a
state of inflammation, by this means.

What are the objects to be gained by bleeding
in this stage? They will vary according as the
fever continues to be of the same kind, as in
the 1st stage, or not: if the fever is still violent
with a hard as well as quick pulse, our 1st object
will be to lower the heat's action by the same
treatment as during the 1st stage, but it seldom
happen but that the pulse change in charac-
ter at this period, it generally gets quicker and weaker
That is the cause of this change? ½ a certain quan-
tity of the constituents of the blood, has been extra-
avated into the dung substance and therefore
that much less circulating through the body by.
This extravasation has given rise to obstruction to
the passage of the blood through the lungs & therefore
causation within the lungs. 3½ The extravasation's
congestion have given rise to great dyspepsia, so that
the blood is imperfectly actualized and does not
fully out of the lungs so freely as usual.
The increase in the difficulty of the passage of the blood, from the Right to the Left side of the heart, called the Right ventricle to greater effort in order to overcome the difficulty; at first it is able to do this, by increasing the number of its contractions; but as at the same time, the Left ventricle, by the increased frequency of its contractions, sends the blood back to the Right auricle more quickly than usual, a time comes, when the Right ventricle gets over-distended, & thus further impeded in its function; less blood passes into the left ventricle on account of the difficulty with which it passes through the lungs, the disparity in the quantity of blood on the two sides of the heart causes unequal contraction and therefore loss of power.
The diminution in the quantity of blood propelled, the irregular weakened state of the heart, explain sufficiently I think, why the pulse is often small, weak & quick at this stage.

Our object is then, to relieve the over-distended right side of the heart, to enable it to contract perfectly on its contents. 1st. To diminish the obstruction in the lungs caused in great measure by the over-distended veins. That this object
is obtained by by taking blood from the arm, I think most probable, as we thus prevent so much blood getting to the Right side of the Heart and allow time for the Right Ventricle to empty itself. Deep blood being sent at each pulse into the lungs with better directed force, it passes on to the left side more easily, and the congestive effects are for the time greatly lessened. Certain it is, that the blood letting has sometimes a most marvellous effect on the Dyspnea, and that the Dyspnea does not depend on the obstruction caused by the exudation matter alone; it is also certain, for then blood letting could not have an immediate effect on it, and the Dyspnea should be greatest when the exudation is in greatest amount, which is not always the case; that it is so sometimes is true, but then there is generally great vascular excitement keeping up the irritative congestion within the lungs at the same time, & when this has subsided, although the exudation still remains, as shown by the Physical signs, yet the Dyspnea has disappeared. Although the Pulse & Respiration by no means bear an equal relation one to other in this disease, yet it is generally found, that an increase
in the frequency & force of the Pulse, is attended with increased difficulty of Respiration. The greatest discrepancy between the number of the arterial beats and the Respirations, occurs generally at the commencement of the attack, before any great amount of extravasation has taken place; so that probably the irritation & increased sensibility of the part of the lung inflated had much to do with the occurrence of great dyspnoea at this period. Local bloodletting is more commonly used during this stage than general, and does relieve the sensation of dyspnoea & weight within the chest to a great degree, probably by removing congestion to a certain extent, as the fact that dyspnoea arising from obstructive disease of the tracheal orifice is much relieved by coughing, but the modus operandi is not clear, probably this subject will be better understood, when the intemal of the propagation of inflammation by continuity is fully explained. \[...\]

Strychnine aqueous is also useful in this stage, and should be given in the same manner as I before stated, when speaking of the treatment of the first stage, and it may be continued guide to the end of the disease, gradually diminishing
the quantity as the convalescent advances towards health, as it does not in any way prevent the return of the appetite, and yet prevents any tendency to undue excitement. Some persons trust entirely to Saffar bimet, and in many cases it succeeds, because, I think, most of them are not thence in character, if after exhibiting large doses to the patient for 6 hours we have produced no effect on the pulse, nor lessened the dyspnoea, I don't think we shall be justified in throwing aside the aid of the Cause.

In theemic idiopathic Pneumonia, where the fever has been paroxysmal early & the inflammation prevented from extending; there is little after treatment required; we should prevent any error in diet and take especial care that the patient is not exposed to cold: convalescence may be hastened by using some slight tonic, such as infusion of Rhubarb and where the expectoration continues to be profuse after cessation of the physical signs, I have seen Bichir with sulphuric acid given in 2 or 3 days. This I believe is mostly the case where but a moderate amount of sputum had been consolidated; the expectoration matter is removed by absorption.
Expectoration, in some cases, pretty rapidly, especially with those in which there was no antecedent organic lesion in the lungs or heart. In other cases although the general symptoms have abated & the appetite in some measure has returned, yet you get no perceptible diminution in the physical signs; there is a tendency for the pulse to rise. & discharge to be increased, at night; the cough at times is troublesome & occasionally the spuata are somewhat tinged with blood; in fact the inflammation is not extinguished, it still smolders on & the least puff of excitement may bring it again into full vigour. This state of things is well illustrated by the case of the man named John see page 33 and I believe is a very dangerous state of one that calls for more active treatment.

Sometimes the consolidation passes away from one side, then the opposite side gets gradually affected, the change taking place slowly. The general symptoms not being marked, & in the cases in which I have seen this to take place, there has been functional or organic disease of the heart, the cases were not chronic & the treatment which seemed to do most good was that by small doses of Bluebill & Cinch as to
affect the lungs, congestion with mustard to 
1/4 oz. of mustard at bedtime. One case I had
under my care last year in University College Hospital
from the 23rd of June till November 9 when I left U.C.H.
the consolidation still existed on the left side, it
had been originally on the right side, and she
had had at least three partial recoveries. When
the occurrence of another attack placed her in
the same or a worse condition than before.

Sometimes you are called upon to treat
a case which has been allowed to run on nearly
to its termination, without any attempt having
been made to arrest its progress, or if the
attempts have been made, it has failed, and
the disease has reached the end of the stage
are we to bleed now? I believe never for in these
pneumonia the inflammation has exhausted itself by
this time by the amount of consolidation which has been
thrown out, and the general symptoms show that
the nervous system is seriously depressed— we
have a heavy droopy state. The Respiration performed
in an irregular intermittent manner—5 to 6 or more
inspirations Respiration quickly performed. Then a long
pause intervening— the pulse small, weak and intermittent.
The cough ceases the able to bring up the mucous secretion. The expectoration therefore ceased, the surface becomes cold, and the mind becomes affected, especially the memory, sometimes there is delirium. When the disease reaches this stage, I do not think it is in the power of medicine to save the patient. Now it is evident that if a stimulant plan of treatment is required, as it certainly is, at this time, an opposite plan of depressing, was not required, a few minutes previously, and to hit exactly the time at which we should abandon our antiphlogistic remedies, I have recourse to other calculated to support the little remaining strength of the patient, is what is required of the Physician, when the disease approaches this stage.

The Potassium Carbonate of Chloride, I believe is the best remedy we can use at the approach of this stage. In the disease, given in doses of 1 or 2 grains in a couple of ounces of the decoction of Vincetox, it does sometimes seem to bring patients through this almost hopeless stage of the disease. It acts as a stimulant on the bronchial mucous membrane, as well as on the system generally. I tend to promote the expectoration of these secretions which would otherwise cause death by suffocation.
Countervacination, is generally said not to be of use during the irritative stage of Pneumonia whilst the inflammatory fever runs high, and it is recommended to employ it only after that has been subsided. Dr. Todd of King's College London published 2 cases last year which he treated successfully with countervacination by means of hot turpentine fomentations to the whole side affected, and the administration of large doses of the dry, pure Ammonia acetate internally. He stated that the cases were tolerably chronic and the patients were well in a fortnight. I do not suppose that cases which I have had in view when I have spoken of chronic Pneumonia, in which there is a great tendency for the inflammation to extend itself, to the pleura and pericardium & to be attended with high fever & much grani & dyspncea, can be successfully treated by these means alone, but in all cases of those cases where we fear to take any blood from the patient, and especially if an effort is made by nature to cast off the disease, or any poison which may be the cause of the disease, by the skin, I think the plan is likely to afford the patient as good a chance of life, as any of which I am cognizant, care being taken at the same time, to keep up the patient's little remaining strength, by light, nutritious, nourishing diet.
I have not offered these few observations for the consideration of the examiners, without being fully sensible of their cussed, I suppose. But I entertain strong hopes that their shortcoming will be regarded with an indulgent eye, when I say that they have been composed during convalescence from Typhus fever and that my state of health is still such as to render me quite unfit for the intellectual exertion which must be employed by one seeking to treat an important subject even in the most superficial manner. Unable to undergo the labor of searching in the extensive literature of Pneumonia, for opinions and evidence confirmatory or adverse to my views, I have been obliged to restrict myself to a detail of my already formed opinions on a portion of the data on which they are based. The frequency and fatality of Pneumonia render it the most important of all inflammatory diseases; the treatment of severe cases of it is therefore a subject of the highest importance, and I only regret that want of time and capacity prevents me from setting forth, in an appropriate manner, my grounds for thinking that at least some valuable lives might be saved, were the necessity of active treatment in a particular class of cases, more generally recognized.

Porter

Frederick Lock, M.R.C.S. Eng.
Cases.

Emanuel Watson, aged 34. Labourer admitted into Ward 4 of University College Hospital, May 6th, 1832.

A strong muscular man. Has always enjoyed good health, but after over exertion has sometimes had palpitation, faintness, &c. About a fortnight ago began to feel that his breath was getting short, that he could not do so much work as usual, due account of a feeling of languor & dyspnea; had a slight cough & a little expectoration in the morning. One day he began to feel rather chilly than usual to go to work, because of without his jacket or neckcloth; arrived at his master's house he found that there was no work for him to do that morning, stood in the open air all the morning without his jacket, felt cold & chilly, states that he came all over like a gross; skin, rigor was followed by palpitation, cough, & shortness of breath, with a feeling of oppression & uneasiness. He felt no pain had no vomiting. The took some purgative medicine without relief. On the 6th he felt a great deal of pain at 3 o'clock in R. Satercoard region, he applied at the Hospital & was admitted.

Present state.

Lying on R. side, as is his custom, feels pain about apex of heart when he lies on the left side. Skin cold, hands cold, tongue pale & cold, lips pale, slight blueness of gums. He has a good deal of dyspnea. Cough frequent, thumps over his expiration feels a good deal of pain on percussion at 3rd & 4th Costal cartilage & interface and at lower part of R. Satercoard region. Pulse 136, small, weak. Respiration 44. Percussion note - both fronts of good
toward rather duller R. Handlet - lateral regions (note) ideally good. Head: both sound rather dryly not very much to R. rather more than left. Auscultation - both lungs R. louder in moderate quantity, ideally healthy. R. Lat. region R. louder rather scanty. Bladder: R. nom small in amount all over. Bladder at catheter have a little moist rhonchus & doubtful faintness thick if present, is in very small quantity. Left knee. Knees in good quantity healthy. Vocal fremitus R. base moderate all have fiercely felt.

10 p.m. Lying up in bed comp'ny violently. E. extension proper, red spotted, white, just mixed with blood. Surface generally pale, dashed in cold sweat. Dyspnea urgent. Countenance anxious. Pulse 140 full, bounding Resp 30.

12 p.m. Fine respiration heard just below angle of right scapula Dyspnea extreme. Palpitation excessive. Heart's action so forcible that the whole bed is shaken by it. Pulse 130 hard not full Resp 30

Dr. Mustera. Debrabita sanguis e brachio ad 3 u x

H. Anton. Potassium tartrate gr. 1/2

Acids Hydrogenie. Vol. 2

The Compresse: m X

Aquea. 3 j. 1/2. Luminaria d.

Immediately after the bleeding the pulse fell to 80. The respiration to 20 and the sensation of dyspnea had entirely disappeared; the cough ceased almost entirely. The action of the heart became much less forcible.
May 7th

Crepitation is still heard about angle of 11th rib, mixed with bronchial rust. Bronchial rust very distinct, and the vocal fremitus increased at this point. Percussion note dulled at angle of scapula, but duller hence to extreme base, than on left side. P2b R.24.

Some return of dyspnoea in the evening.

8.45 am.

 slept about 1 hour during the night. Respiration, profuse on awaking.Feels some distance but less than last night. Torus palatinus white, papilla fungiforme slightly elevated, when hot tone tinted. P2b R.26. Urine 3X1 deep straw-colour, clear. Babcocks not back about 10 am. Left ate normal. Red flocule at angle of scap. No crepitation audible anywhere.

Fissures 1 near R. base. Expectoration is alkaline, watery, having frothy a few glutinous particles containing fragment of few streaks of blood. Heart's action very foreboding, being in character, a distinct murmur at apex or base. scarcely any cough. Red flocule at angle of cap. 

10th 10 am.

complaint of pain under 2nd rib on left side when he coughs. Expectoration of same character as before. 3R1 strectch 4 pm yesterday. Pulse P2b R.24. found a little tender slight. Mercury flocule. Crepitation is heard at left base. P2b R.28 note at yet not altered. voice less. Feeling weaker 6 pm.
11th

Slept at intervals during the night, but the backache is
remedied now. Seems feeble now —expiration
very slow 10 1/2 ft, but compressible. Resp. 28. Tongue is still
depressible

4 p.m.: Centred red at base, redness. Gum change: intervaginal floss. Bowels
open 3 stools from 3 p.m. A.'s pector. Very little cough. No dyspnea
of which patient is sensible, but he is alleged to stop breaths
between his sentences. Complains again in arm. Kegs, urine 3 3/16

10 p.m.: The back still continues dull

10 p.m.:"The Kegs, urine 3 3/16 deep orange, clear, no albumen. Resp.: Normal in rhym. Clear reg. accom. with expiration reduc."

11:30 p.m.: Left foot. Resp.: normal

12:30 p.m.: Kegs: urine 3 3/16.

10 p.m.:"The back still continues dull

10 p.m.:"The Kegs, urine 3 3/16 deep orange, clear, no albumen. Resp.: Normal in rhym. Clear reg. accom. with expiration reduc."

11:30 p.m.: Left foot. Resp.: normal

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12:30 p.m.: Kegs: urine 3 3/16.

10 p.m.:"The back still continues dull

10 p.m.:"The Kegs, urine 3 3/16 deep orange, clear, no albumen. Resp.: Normal in rhym. Clear reg. accom. with expiration reduc."

11:30 p.m.: Left foot. Resp.: normal

12:30 p.m.: Kegs: urine 3 3/16.
15th cont.

Heart sounds muffled at apex, loud blowing systolic murmur at 3rd left cart., 2nd sound ringing.

Complaints of pain in A.H. Maxillary region; college applied without giving much relief; surrums and bland, none on chin in both lungs present; chills present. Branching a left intercostal artery off scapula also at A.H. base. The chest Pain in right side continuing, pulsating in character & duration of a few cracking character being heard in right of axillary, clavicles region, 3 bleeders were applied to the rent of Pain.

Pain was relieved to a certain extent, but not entirely removed by the bleeders. Bowels moved twice from Coleman Place 6 P.M. Cough rather troublesome. Expectoration rather profuse for day.

Complains of pain in right side when he coughs. Frequent small effusions of clear but tinged serum; all around the right side of chest, below right angle of scapula. Numerous chinks heard audible places, P 92 R 26. A blister applied to right 10 P.M. P 37 R 24 asleep.

19th. The chest Case well. Appetite is returning. P 88 R 24. Systolic thrill increased; sound on chest, stomach off scapula, 2nd. branch of left intercostal region, especially left, inspiration very long & tubular. Heart's action tranquil; a short systolic murmur at 3rd left 2nd & 3rd left heart edge, pretty clear down the sternal margin heard at apex.

20th. P 84 R 22. slept well has felt no pain since the blister
Ordered to have fixed diet.

30 soft compreisible R. 20. Heart, then..heat in 1st space, just within mammary line, 2nd, below nipple. Impulse felt at 2½ in 4th rib on left of sternum. The carbonic acid synchronous with apex beat, directed upwards from apex to sternum. Action of heart moderately forcible, regular. Perfusion: note absolutely dull up to 1st rib, slight dulness in 2nd, interparietal dulness does not go to 1st rib of sternum. Sounds: 3rd left. Car, 3rd and 4th right. 4th left. Vomiting, no vomiting. 3rd left, posterior margin.


28th. Complains a good deal of pain in epigastrium below nipple. Pulse 112. R. 34. The side painted with laitose solution.

29th. P. 188. R. 24. 30th. P. 192. R. 26. Cough troublesome, considerable dyspnea, and pain in both sides of the chest. Keel, canist, since the Bowels acted. Perfusion: Pt. back-duller than left, as low as angle of scapula, then clear to 10th dorsal (vertebra) place, it is as dull as can be. - Left back - dull from 4th dorsal vert. to extreme back. Both lateral regions very dull. Stomach pole oppo. 10th dorsal vert. Left back on deep percussion with one finger, does not come out well. Broad percussion regions, too, dull to deep perc. 10th. Side from to back left. Pulse 108. R. 25. Feels better in the morning, has return of the dyspnea at cough at night.

3d. 10 p.m. Pulse 108 R 28. Cough paroxysmal on attempting to lie down. Dyspepsia very great.


5th. Pulse 108 R 32. Passed a pretty good night. 8 p.m. Had a violent attack of dyspepsia. The surface became cold. Twitched in cord severe. Pulse rose to 140. Small pulse bounding. He was bled to 3 1/2 which relieved the dyspepsia. He was then ordered the following.

R. Hypodr. chlor. gtt. 3j
R. Chlor. str. mii

And 1/4 tinct. rub., 3j

And 1/4 tinct. strychn., 3j

R. Potas. bic. tritrat. 3j
Puls. Acet. gr. 3

Agar. 0j

Agar. 3j

Por. prov. tinct. resin. 3j

6th. 6 p.m. Pulse 116. Fieble, equal, not intermittent. R 28-26 performed in a passing manner with great elevation of the pulse during last.
Face hands at present pale warm & respiring, and have since, they were cold & clammy.

9 p.m. Pws-134 R 22 same character. Then warm. Toque warm, white. Voice hollow. Seems to come in feeble. Crepitus is heard in left supeclav. region and moist rhonchus & little rale in left lung. At 12 no murmur can be heard either in intercostal reg. or at 1/2 of sternum or at 3/4 left clavicle.

1 1/2 p.m. Pulse 114 regular in force but Ham, slightly intermittent R 12-14 hopping. No murmur. Face looks rather level. Not much cough. Expectoration rusty. Falls asleep and then awakens with a start.

Pulse 116 R 22 feels easier. He reclining in bed supported by pillows. Cannot lie down or account of dyspnea. So they treat of remaining in the same position. Eye heavy, expression melancholy, anxious. Lips hard — very little cough. Expect frothy phlegm. Being very desirous to go to his own home, he was allowed to go. I saw him on the 8th. Surface generally pale cold & clammy. Was able to sleep two or three hours during night. Pulse 116. Feeling.

R 24. was ordered the following 9 3/4 of wine:

1/2. Ammonia, 10 grains. 9:30
1/2. Syrup. 10 grains. 9:30
1/2. Camph. Big. 10 grains. 9:30
1/2. for asthma & corporeal.
10th. In getting weaker, sweeter - can be down but a
few short time on account of dyspnea - is very
stead, getting up. Contraction of arterioles, diameter
of heat is still going on. Expectoration now copious
changed with blood. Mucous, sputum. Physical signs
about the same.
12th. Fever projects beneath false ribs for about an inch.
There is some edema of hands & feet. Some moist rhonchi
is heard in front of chest. Poster side of physical exami-
tion is difficult on account of position & readiness of
the patient. Pulse 116 small, weak, intermittent. Respiration
38 gasping, short & quick for several deeps, then a long
pause intervenes. This 1111 1111 1111 Expectoration
coarser frothy tinged with blood. Mucous, sputum.
13th. Very bad night with flatulence & cough. Expectoration
of during sleep - frothy streaked with blood. At present
breathing easily 36 per minute. Some pain below left mamma
all over back. Fine crackling breathing. jugular indrawn.
Deep breath - Respiration poor some moist rhonchi
R. acc. ang. fine crackling friction, Pulses poor at
H. base. Vocal murmurs, rather marked at extreme base.
Over large, hard, tender, edge slightly rough, no prominences
extends to umbilicus. Vomits & Diapers. Also subcostal &
right little & much stomach. Tongue pale moist. Pulse extremely
small, almost imperceptible intermittent. Died next morning.
No post mortem allowed.
John Uff, age 27. Wheezy admitted into Ward 4 of University College Hospital, March 23rd 1852. A strong, robust man, had always enjoyed good health. Had had a cough and a little expectoration sometimes, in the winter, but never severe enough to keep him from his work. On March 21st, he felt as well as ever he did. The next day 22nd, he lost his appetite, felt great tightness in the chest, went to bed at his usual hour, about 3 a.m. on the 22nd. Suffering severely, (states that he breathe like a man in an acute fit). The pain lasted half an hour. It was succeeded by intense pain, shooting through from the intercostal region, to the root of the chest, above the 3rd and 4th rib, costal cartilages, and extending beneath the falciform; heat descending, cough, expectoration of frothy, yellowish, looking putoes, vomiting, vomited wooden yellow, mucus, bitter-tasting. He had several attacks of vomiting on this day, and also on the next. No pain in the limbs or headache.

Present state March 24th:
Lying partly on back, with inclination to left side, cannot lie on right side on account of severe pain. Slight, but very increased during night. Face flushed, especially at cheek.
Severe pain in intestines, reaches and over whole of side, much increased by pressure coughing. Vomitus a very green, frothy, frequent, thin, generally followed by expectoration. Expectoration difficult, frothy, brownish, looks like gum.
liver, strongly alkaline from ammonia. 2 c. found more
moist. Action in the fluid portions - not tinged with blood.
Fir in amps. Force of good strength 8/10 8/10.
Expansion of both dia. clav. regions, moderately good. Right
slightly more than left. - Abdominal regions - left greater
than right, but right does more. Tiredness. Right clav.
region well marked as low as 5th rib. - left slight.
Sall. regions - right almost totally abolished. Left very slight.
Pericard. pericarditis out of the whole of left front.
Breech. Right infraclav. region - slightly tympanitic as low
Region small in amount. Swellings - subclav. clav. nodes, tend.
Lyst. - small nodes - subclav. clav. nodes. Tens.
Sartorius region - right Pericardium note absolutely dull below sternum,
left - dull good tone. Pericard. almost inaudible. Right a
little pericard. clav. - left - don't feel. clav. clav.
Fricken is heard 2 miles below. Right murmur after anything,
not heard during tranquil disposition.
Back. Splea opening large. Pericardium note (right) duller
than left, but still mod. clear - from right infracardiac regions.
No local, marked delusion. Left lower vs angle deep. Men
in infracardiac region. Abscessation. Right side - nothing heard
ascending. Eroders from there, towards lower part of infracardiac
region, distant of flexible. Pericard. with sternal. clav. clav.
Middle of right infracardiac. Node markedly brought out most marked in right.
becomes weaker towards. tips of infracardiac region.
Left back generally, sounds well. Rest accompanied with severe headache and nausea. Weakness on deep inspiration & coughing in P. interscap., e.g. opposite spine & scapula. He was bled from a small wound in the arm from which 3x more difficult
attempted and lemon ordered the following

9. Ant. fust. tart gr. 1/4

Lig. ammon. aci. 3ij

Tea. Comp. co. 4ij

Hyosc. 3ij

25th. The pain & dyspnea were somewhat relieved by the bleeding. The pulse has risen again to 116 and the dyspnea has returned. The pain is also very severe in Pt. side. Respiration 36 that the patient felt pain
cough troublesome. There is 3vi depot of red blood
corpuscles & a trace of albumen was ordered the following

9. A. hydrochlor. gr. 2

Ant. fust. tart gr. 1/4

Pat. opii gr. 1/2

Internal tinct. gr. 3/4

25th. Patient, 3° quaque hora aemenda. The patient in about the same state up to the 26th
when the dyspnea was increased about the angle of
2 capsule for R. mammae region. Friction could to
be heard under R. nipple. The pain & dyspnea
remitted occasionally, but never ceased entirely. The gases were not affected by the mercury.

On the 29th I discovered that the inflammation had extended to the pericardium. The pulse rose to 130 became weaker, the respiration sound was heard at the apex, and a systolic sound of sound towards left infraclavicular region. Pain was greatly increased, he was very restless, could not be easily moved in position. Dysesthesia great. A mustard poultice was placed over the heart—it did no good.

8th Pulse 132 very weak with a tendency to intermittent. Respiration 44 short quick. A humming sound heard at base of heart. Other physical signs the same—towards the evening the pulse became exceedingly small weak. Intravenous has been ordered.

Zapata, of Mlei the following Rx. Daj. amm. ext. 29:

45 amm. ext. 29XV
40 chlor. sulph. 26
Tartar. 3
Urine — 3
B. de gravaque 4.

10 pm Lungs has ceased. The Inspectorate the pain described of contusion easy breast. Says he feels all right now.

Died at 11 o'clock next morning.

Post Mortem.

On opening, the chest the right, lung did not collapse—it was firmly adherent to the pericardium.
and to the costal pleura, by a thick layer of tough exudation matter. No fluid in pleure. When
the right lung was cut into, at the apex, a little
pulpy exudate stained with blood scattered, when
preserved & turned into water it floated. Hereby
the lung was told, a section of it was granular
and its pulp in water after being squeezed. The
Bronchial tubes were considerably injected in
both lungs but the left was healthy in this respect.
The pleurae contained 3xx of fluid and the cardiac
layer was covered with a layer of exudation matter,
about 2 lines thick, having a honey comb appearance.
The other organs were healthy.

James Murray, Atlas 36, clerk, was admitted
into Ward 4, University College Hospital, May 5th, 1832. He
has been under the care of Dr. Vickers for some time with
Brights disease, without dropy. Has had some symptoms
of remic poisoning. On the evening of the 5th he had
an attack of shivering, it was not severe but he felt
very much depressed; he was ordered the followings draught:
10 Spiritus aromaticus composite m xx
Dr. Urnei sulphurici co. m xx
10 Camphora composite m xx
Aqua
3/4 the cubic stat.
9th

Felt more comfortable, surface warm, moist.

10th


19. Hydroc. chlorid. gr II

19. Ess. colocythis co gr II utpel. station.

19. Ant. bell. tart gr 1/4

Potassa hydr. co

agua — 3i soft hanson

c. Acid. citrici gr XV 1/2aguea hora remendis.

11th

Sleeped well, feels much refreshed. Sensation of dyspnea almost gone. Cough much easier. A strain only during night, foamy, rather tenacious, yellowish. Tongue slightly covered with white fur. Countenance red anxious than yesterday. Surface warm, not hot, rather dry. Pulse 108 rather hard. Respiration 18. Percussion note too clear, especially at 1st, 2nd, 3rd, 4th interspaces, both sides, thence to base, rather dull especially Right. Respiration is still heard
at 9 A.M. Bowels open. Has taken 14 doses of the mixture; had not passed. Feel no pain anywhere when Pulse 112 hard and rapid. R. 28 feels as absolute pain but feels heavy bloated about the chest. Very little cough, expectoration difficult, must cough when he lies on right side, viscous, rusty.


Respiration. At base, dull up to opposite 8th dorsal vertebra hence to spine of scapula too posterior. R. intercostals duller than left. Left base dull up to 6th dorsal vertebra hence to apex too clear. Both fronts into tympanic Auscultation. Respir. heard to extreme base, both lungs, but very weak at left base. Vocal membranes abnormally great, so the extent of the clearing of tympanum shown.

9½ a.m. The doctor said will see he feels much lighter. Pulse 108. Expectoration much more easily expectorated white, frothy, not rusty. Urine moist, same character. Bowels not open since yesterday morning.

P. J. Hydroy C. et al.
13th

all over left font. Heart: Constrictive systolic murmur at apex to 1st, friction sound heard here also a chugging sound. Emphysema & corrugation
sabot All. hydropneumia gpv stat
et All. Perine 3'o clock heard too
14. Acidia acetec 3i
Sacchari 3i
Oxyge 3i rest hestaris 2" gazquez 1
habitat Vini Alle 3ii
15th State, that he has no idea of time, does not know how he passed the night, says the weight in the chest is increasing, that he feels the expectorancy stating. Reflex 100 signs of lead. P108 reflex flat. pupils equidistant. Lees prepared by pillows he does for a short time. then awakes with a start, slight twitching of R. armistry. Voiu hollow
breaths with difficulty. Face pale. Jaw narrows around eye. Tritium at R. font as before. Heart sounds loud at apex in a hollow rumbling noise. at base covered by bronchial
rate.
16th. Gradually getting worse. Reflux more clear of difficult.
Ishael visieals opened widely. Touches his hand to cardiac region. Atria contracts, state. I astat of
great restlessness alternate. Tarkship of armsrego
Examination shows that the lungs are very dry. The chest
and abdomen are hard and cold. The body warmer, Pulse: 92 per min. R: 82-16
R. H.: Another sulphur co 3
The Camphor co 3
Alcohol — 3 fl. oz. A.H. stat at comm.end.
A.H. Jenneri 3
5 p.m. Pulse: 92 very weak. R: 12 very slow. Extremely restless
sitting up rapidly.
10 p.m. Pulse scarcely perceptible, could not be counted.
Died 11 p.m. in the morning of the 17th.
Post mortem:
The right lung was found in different stages of inflammation. The lower lobe was solid, a yellow fluid
drained into it. The centre was found of a greyish colour
and so soft that it broke up into a yellow semi
fluid mass, when squeezed between the fingers. The
rest of lower lobe and also the middle lobe presented
on section a pale granular appearance of
reptilation — passing through into water teak.
The upper lobe was much infiltrated with pus, which
stained with blood. No adhesions between the
pleura. Left lung — much infiltrated with bloody
serum, especially at the base. No fluid in Pleura.
Both lungs emphysematous, especially the left lobe.
Along the anterior border of the upper pole of
left lung there were several large emphysematous
vessels. (The portion of pericardium against these, probably
gave rise to the portion heard during life.)
Heart: A little fluid in pericardium which is healthy.
Heart small, a white patch on anterior surface of
Right ventricle - pericardium over it quite smooth.
Endocardium valves healthy.

Kidneys: Right contracted to about 75 of normal size. Cortical
substance very thin and pale. Left kidney
small but larger than right. resembles the left in
other particulars.
Liver & Pancreas healthy. Stomach & intestines etc.
Bladder contracted, mucous membrane rather more
infected than usual. Brain. Satiny gray. third
ventricle filled up with serum. Substance healthy.
Coronary artery Membrane - a shade of griscy about
them.