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AN

INAUGURAL DISSERTATION

ON

Pneumonia

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Pneumonia

The above is the most universally accepted name for inflammation of the spongy tissue of the Lungs: the essential organ of respiration; which is double and occupies the two sides of the Chest. When this compressible and dilatible Structure is inflamed we call it Pneumonia.

There are several varieties of this disease; which are founded upon the part of the organ affected and associating diseases. Character of the fever, general State of the System &c. The inflammation may occupy a conciderable extent. embracing a whole lobe or lung. This is the Common form of

the disease; Though both lungs are sometimes inflamed, it is then denominated double-pneumonia. Again when associated with a low Typhus condition of the System it is called Typhoid-pneumonia. Finally common or lobar pneumonia may be of long or short duration; I only propose speaking of this form and of it, as it prevails in Western North Carolina.

Common or Lobar Pneumonia. There are three well-marked Stages in the acute form of this disease. First Congestion, second Inflammation, and Third Suppuration.

Repeated post-mortem examinations have discovered the lung-

in the first stage of this disease is in a state of Congestion, or engorgement. Its Colour is that of a dup-red; it is more Compact and heavy, but less tenacious than in health. Notwithstanding its increased density, it still floats on water. When Cut and under pressure it exudes a bloody and somewhat frothy serum.

The extravasation has not yet entirely obliterated the air-cells they still contain air.

If the disease be arrested in this stage the lung resumes its healthy action and appearance but if not it passes into the second stage, hepatization.

We now find the lung more Congested and of a dup-red=

or reddish-brown colour. Effusions have taken place into the smallest bronchial tubes, cellular tissue &c.
The matter effused is either blood or fibrine. The lung has become solid, insomuch that it no longer floats, but sinks in water. When cut into, it presents a granular appearance. It no longer crepitates from pressure, but, when pressed emits a bloody serum.
In the third or suppurative stage the lung undergoes an alteration of colour; it presents a reddish, yellow, straw, or drab; or a grayish hue; sometimes mottled with red. It is softer than in the second stage and is full of purriform matter. The gray pus shows itself upon the cut surface

= of the lung in minute drops. When crushed between the fingers, or otherwise, it is reduced to a pulp.

Symptoms, Course, and Termination of Common Pneumonia.

It is most generally ushered in, with a decided Chill; followed by fever, pain, in the back, the side or Chest; which is sometimes dull, and sometimes acute. This dull pain is truly a lung pain, and in acute cases we infer a participation of the pleura. In acute cases when both lungs are inflamed. The pain may be felt on both sides; or it may be concentrated to the region of the Sternum. The breathing is always quickened; and at the same time there is almost

= always a feeling of oppression which is aggravated by vocal efforts

Cough is another attendant symptom in the course of this disease, and is more or less painfull. It is at first dry; or generally so, but in a short time, often in one day a viscid tough, semi-transparent matter is expectorated. Which is, or soon becomes, stained with blood; so as to give it a red, yellow, or brick-dust colour according to the quantity of blood. This particular coloured expectorated matter is one of the most reliable diagnostics in pneumonia

Fever is always a prominent symptom in severe cases. frequent

= attended with extreme head-ache,
from which the patient seemingly suffers more than the pain in the breast. Delirium occurs occasionally, and is an unfavorable omen generally.
During the fall, winter and spring of 1857-8 I saw between thirty and forty cases of pneumonia, nearly all of which had a confined circumscribed flush of a dark or deep-red hue, on the cheek corresponding with the affected side. I never noticed this distinct flush previous to the time I speak of. The experience of C. W. Tracy, a physician at Kings Mountain, N.C. and by the way a man of extensive practice and twelve or fifteen years=

= experience corresponds with the above

Physical Signs. are very important in the diagnosis of this disease. In the first or congestive stage, there is slight dullness on percussion. and diminished respiratory murmur, but at an early period the characteristic crepitant rhonchus is heard. Sometimes it is only heard by deep inspirations, and on the other parts of the Chest the respirations may be healthy. The crepitant rhonchus is produced by the separation of the walls of the vesicles in inspiration, and very nearly resembles the sound given by rubbing a lock of hair between the fingers near the ear. As the disease advances crepitation ceases, and the respiratory murmur is no longer heard.

No sound is given off at all or only that of bronchial respiration, which is characterestic of the second stage or hepatization. There is also a stronger vocal resonance in the second stage. If the disease be arrested in the first stage, the crepitant rale gradually subsides, and the healthy murmur returns. When hepatization is fairly established and resolution takes place; bronchial respiration passes off, by degrees, and crepitation generally returns, but soon gives place to the healthy murmur. This in connection with the healthy resonance on percussion, speaks loud for the restoration of the diseased lung.

The Third stage cannot be so well distinguished if at all, it presents the same flatness on percussion and the

=same respiratory sounds. If the disease yealds to treatment in the congestive stage, which it sometimes does. the pain disappears; the expectoration becomes more copious. The frequency of the pulse with other febrile symptoms diminish, and the tongue cleans. These favorable symptoms begin to develop themselves the second third or fourth day. Convalescence may be established in lik than a week In a magority of cases the first stage runs into the second, this hapens at various periods, but generally in from one to three days. The change is not marked by any very obvious symptoms; the breathing may become more diffficult and hurried and the countenance may assume a duller expression. Instead of an=

= increase of pain it often diminishes.
If the disease is not now arrested
it passes into suppuration; this
also occurs at various periods;
but, most usually sometime in
the second week. We cannot
distinctly mark the accession of
the third Stage; but generally the
difficulty and frequency of respira=
tion is increased. The pain is
not so severe, the expectoration
becomes purulent, or assumes a
dark colour, or ceases altogether,
in consequence of debility of the
patient, disabling him to throw
the matter off. The countenance
becomes pale and haggard the pulse
extremely feeble and rapid, the skin
is bathed in a cold sweat and
death is the result. The mind

= generally remains clear to the last.

The above is often the course in fatal cases, but; the disease is apt to take a favorable turn in the second stage, and generally at the end of a week. Four or five days more will establish Convalescence; although the case may be protracted from some symptom failing to take its leave

Diagnosis.

Pneumonia may be confounded with several diseases, only one of which I shall name here. And that is Bronchitis. In cases of bronchitis extending to the minute ramifications of the bronchia, pneumonia is very closely resembled. The expectorations, though sometimes streaked with blood, never has the viscid brick-dust character, of the sputa of pneumonia

= These diseases are occasionally combined. and it is frequently almost a matter of impossibility to distinguish them

Prognosis

In common or lobar pneumonia, occupying only a portion of one lung, in an otherwise healthy person and uncomplicated; we may reasonably expect a favorable termination. Cases of this kind will often get well even without treatment. This disease is generally mild between the ages of Six and twenty-one years. In persons over fifty, and in advanced age, this is a dangerous affection. The danger is measured by the extent of inflammation. In tuberculous subjects or those of a scrofulous diathesis, pneumonia =

= is sometimes attended with a copious tuberculous deposit, which under these circumstancies may be concidered fatal, and often runs a rapid course.

Causes

Vicissitudes of the weather, are the most frequent causes of pneumonia. Sudden exposure to cold when the skin is warm and moist often induces it; more especially if the subject is laboring under a catarrhal affection at the time of exposure

There are other causes, as, direct violence, poisonous inhalations, excessive use of the voice &c, in short any thing that determines the blood to the lungs may produce Pneumonia.

Treatment

It is almost always necessary in the out-set to give a full dose of Calomel, followed in a few hours if thought necessary by Oil or Salts. We may now commence with Ipecac, in nauseating doses, and give it every three four or five hours. as the case may be. Cups, Mustard-plasters, Pepper-poultices and Stimulating liniments, &c may be employed as counter-irritants directly over the pain or inflamed portion of lung. If the patient be restless, the cough distressing, or the bowels disposed to act too-freely from the use of the Ipecac. add from 1/16 to 1/8 of a grain of Morphine to each Ipecac powder. and continues as before. There should be an expectorant

=used. The following makes a very good one. Syrup of Squills 1.oz paregoric 1/2 oz and Spirits of Nitre or Tinct.. of Lobelia 1/2 oz. from 20 to 40 drops of this mixture may be taken every three or four hours between the powders. Flax-seed-tea should be used, with the addition of a little Nitre. if the urine is high coloured. Cold water should be allowed all the time. If the symptoms are not modified and the pain seems to be permanently seated it would be well. to apply a fly-plaster to the Chest, if there is not too-much arterial excitement. though a great many cases can be relieved without blistering. When the blister is drawn. it is often necessary to make another addition to the Spread

= and it is this, add from one to three grains of Quinine to each dose of the Ipecac. The better plan, is to have two sets of powders, one composed of Ipecac & morphine the other of Ipecac morphine and Quinine. The former to be given until the skin acts pretty freely or becomes moist. Then commence with the latter. and if the skin again becomes dry give the Ipecac alone or combined with morphine. I have known many dry tongues to become moist in a short time. and remain so, under this treatment The above with but very little variation was the treatment of those cases that I spoke of seeing. in the early part of this dissertation.

= There was not a vein opened in either of them, nor a grain of Tartar-Emetic administered nor one of them salivated, and yet they all got well.