AN INaugural Dissertation
ON
Thesis Pulmonalis
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Phthisis Pulmonalis.

This fell destroyer of humanity is no respector of persons, committing its devastating effects upon the great, the small, the noble, the ignoble and is the great endemic of the world. From the peculiar construction of the lungs, being held together by areas of fibrous tissue it appears that they are strangely liable to the development of tubercles; more so than any other part of the human organization. This susceptibility I would say arises in part from the momentous offices the lungs are required to perform, and their liability to inflammatory lesions. By authors, phthisis has been divided and subdivided into many species. Such as tuberculous, granulated, cancerous, melanotic, calcarious and ulcerous. In this dissertation I shall strictly confine myself to the investigation of tuberculous phthisis. Believing that it is
The only form, by passing through the different stages that can or does terminate fatally, or can be characterized by all the true symptoms of phthisis. Then we are driven to the conclusion that phthisis consists truly in the development of tubercles in the lungs. It is also notorious that these tubercles are of dull yellowish or whitish appearance. Or they may be hard, translucent, shining, homogenous bodies and not uniform in consistence, varying in size from a mullet-seed to that of a pea. They seem to have quite a preference for the apex of the lungs, being often found there in abundance and nowhere else, though they may be dispersed throughout the lungs, producing great irritation-pulmonary. They are often so superficial being just beneath the pleura that they produce irregularity of surface perceptible to the touch. The time requisite to enable tubercles
To obtain their greatest magnitude can in no
wise be stated definitely. While in one case they
may progress so mildly that the disease is scar-
cely conscious that the greatest enemy to humanity
is burying its poison deep in his vitals, others
are seized almost instantaneously, the disease
runs its course in a few weeks or months at
most, and they are swept away while others
linger for years. Let it suffice to say that they
gradually increase by new accretions. While it is true that the nature of tubercle has
been a subject of no mean analytical inves-
tigation, it is equally deplorable that no satisfactory
result has been attained. While the microscopic
constitution of tubercles before softening has been
found to be lyzaline, molecular and characteristic
corpuscles. Shortly after the new accretions are
withheld from the tubercles the process of soften-
ing commences. This commonly begins in or near
The centre and advances towards the circumference until the entire tubercle is converted into a soft putrescent yellowish mass, not dissimilar to pus in appearance. Though this gradual softening is by no means always the case. Sometimes it takes place very rapidly and large portions of the lungs rapidly disorganize. In this condition the confined matter begins to display its irritating properties, by setting up inflammation of the adjacent parts which terminates in ulceration establishing a communication between the tubercle, or rather, putrescent mass, and the bronchial tubes. Thus there is an outlet or canal formed for the escape of the offensive matter and is expectorated leaving a cavity or cavitæ. The contents of the cavitæ are a little bloody pus, tuberculous matter, and probably a slight remnant of disorganized pulmonary tissue. The blood vessels in the immediate vicinity of the cavitæ and obliterate.
And thus we see these processes and carriers on until the vital functions of the lungs are destroyed and unable any longer to perform the function of respiration and the victim perishes. I am aware that the above exposition of the rise and progress of tuberculosis does not meet with universal approval, yet it seems to me the most plausible construction that the medical world has ever countenanced. From the observation of索尼 it appears that the left lung is more liable to the development of tuberculosis than the right one. Next to the lungs in frequency, he observes that of the lymphatic glands, the pleura, intestines, spleen, liver, peritoneum, membranes of brain, brain, bones, pericardium, stomach, kidneys, pancreas and in fact the entire human organization feels the mighty burden. It is greatly oppressed.
While the lungs and the great centre of destruction it must not be passed by in silence that the adjacent parts are often diseased. Probably if there be one lesion more frequent than all others, it is the adhesion of the lungs to the pleura postalis. The liability of the epiglottis, larynx and trachea to take on diseased actions, is probably not so great, yet they are by no means free from ulcerations. The bronchial tubes also sympathise with the lungs and sometimes take on diseased action. It is not my intention to enter into a detailed investigation of the various organs, yet we shall remark that the liver often assumes a fatty transformation with increased dimensions. This probably is not so frequent as representation.
First Stage

The symptoms characteristic of this stage are so mild that they scarcely ever attract particular notice or excite the suspicions of the patient. Among the first probably is a slight cough which the patient almost always refers to having caught a cold. Though I would not be understood as asserting that this cough is always present in the first stage. The cough, for the most part, is attended with frothy expectoration, being at first clear, and afterwards assuming a greenish tinge, and occasionally slightly opague. Acute pains between the shoulders are not unfrequent occurrences. Pains in the chest and side with derangement of the digestive functions, with different degrees of temperature and occasionally night perspirations with diminished strength.
and an advancing proclivity towards emaciation. The pulse is generally accelerated.

Second stage.

This stage now glides in almost unperturb'd or may usher in with a profuse hemor-
hage. The febrile symptoms now increase probably on account of the putaceous
matter of the tuberules producing inflammation of the surrounding parts, being obstruc-
ted in its exit. The symptoms are now generally aggravated. Acute pains in
the chest, heat, thirst, loss of appetite, jaws,
tongue and general debility. The most unque-
nual sign of the second stage having set in,
is the prevalent expectoration, in compact masses,
of a green opaque color, with small lumps
of soft tuberules. Bowel is increased, with
night-sweats, profuse and occasional dysp-
nea. Hemorrhage not so frequent.
The menses at some period during the disease are suppressed. Nevertheless, patients often in this stage seem to improve much by a faithful and well-timed administration of remedies discreetly prescribed. So much so, that prominent symptoms seem to disappear and for a time the patient actually seems to be improving and has gained strength and flesh and in fancy he is doing remarkably well. But this delusive calm is often followed by a wild tornado which more than compensates in the way of rapid progress for the amelioration of the previous symptoms. The appetite is irregular. Diarrhea is a frequent attendant upon this stage and often very exhausting. Nausea and vomiting are not frequent attendants upon this stage, though not always absent.
Dr. Thompson has given to the medical world a symptom which he considers an unmistakable indication of tuberculosis in the lungs or a tuberculous state of other system. This is indicated by a reddish streak or margin at the reflected edges of the gums, having in decided cases a vermilion tint. Hemoptysis is often an alarming symptom, often requiring medical aid to check its progress and is a symptom of both stages or it may be present in the first stage and absent in the second and vice versa. Towards the fatal termination oedema of the extremities intervenes with redness of the tongue. The patient usually is able to sit up part of the time until near the approach of death, at which time the weakness becomes so powerful that.
Expectoration ceases, cough discontinues, phlegm accumulates in abundance in the lungs and the vital spark is blown out on account of the accumulations obstructing the passage of the respiratory system. Generally the intellect remains brilliant until the last act of life has subsided. Yet this is not always the case, occasionally for the last twelve or twenty-four hours the mind is clouded, the imagination wild and often startling. With a recapitulation of a few of the more prominent symptoms of phthisis pulmonalis (while I have omitted many of the minor symptoms) I shall bid adieu to the symptoms for the present. The prominent symptoms are cough, dyspnea, hemoptysis, pains, fever, frequent pulse, emaciation, night sweats and debility.
Causes.

There is a state of system denominated tuberculous deathis or predisposition. And it will be noted that a deposition of tubercles in the lungs is not the entire foundation of deathis, but there must always be a morbid state of system antecedent to the development of tubercles. Did it not precede I can see no possible chance for their development. I further believe that this state of system is identical with the well known scrofulous deathis. Although I do not profess to be able to explain the exact nature of this deathis. While some have conjectured that it was owing to a relaxed state of the tissues, others have been equally enthusiastic in imagining that it was owing to an undue proportion of red corpuscles in the blood.
It is unquestionably true that there is a morbid state of system which I am pleased to refer to an impure state of blood. There can be no question as to the inheritance being the most influential predisposing cause. That it is hereditary no sane man will deny, yet that it is hereditary in every case and can not be acquired, is a question that I have no great desire to controvert, yet as I am always "for or against the mill dam" I shall advocate the unpopular side; that it is hereditary and no mistake. Though occasionally cases of phthisis occur which at first sight would seem to invalidate this conclusion, yet if their parents never manifested any symptoms of phthisis, by a careful examination of the history of the family, find that an aunt, uncle, grandfather,
Grandmother or both of them have been the victims of the formidable malady. We often observe that one phthisical parent entails the disease upon the offspring, while if both be affected it is almost certain. Should the immediate descendants escape its developed form, that is no reason why they have not retained the predisposition and are enabled to hand it down to their offspring. Yet it is a great proof that it has been nursed in the system in its latent form, only wanting an exciting cause to arouse its stupidity and move its victim down. If the father be phthisical, of the children, the girls are liable for a greater degree and vice versa. Cold damp climates have been accused of being prolific in the production of phthisis. I maintain that any one who has a hereditary taint
On a predisposition, may have tubercules developed from any exciting cause capable of irritating or inflaming the lungs or producing too great a flow of blood to those organs or an unusual secretory effort. There are many other causes less significant in their character and influence accused of having exciting influences; such as the inhalation of arsenics and over exertion of the lungs, external violence, tight fasting, and many others which I have not space to mention. Age has its influence. There seems to be a remarkable exemption until after puberty. The system after this period does not need such an extensive supply of nutrition to supply the growth and repair of various organs; therefore it is reasonable to infer that there is a surplus elaborated and who knows but that this
Surplus may aid in the deposition of tubercles in the lungs, in those predisposed? Probably the most prolific ten years of life is from eighteen to twenty-eight, though age cannot be looked to as an exemption. Sex has its influence. Appearing in women sooner than in men. This may be easily accounted for when we reflect that women arrive at the state of femininity sooner than men. Women are more liable to the development of tuberculosis than men. This arises from being more delicately constituted and hence more liable to the lesions of delapitation and debility, as well as their sedentary habits, their greater sensibility, their greater consumption diathesis, being more readily affected than men notwithstanding the greater exposure of the latter.
Occupation requiring confinement with toms have an injurious influence, while those requiring vigorous exercise in the open air are less exposed. Different diseases have been accused of ushering in this disease. Disappointment in affectious or business may exert an injurious influence upon the system, through the medium of mind by prostrating its energies and abating its hopes. I have omitted many minor exciting causes, while I have located the mononoth cause in the blood, unequivocally ascertaining its hereditary diathesis in every case.

Montagius

Is a dogma that deserves the universal disapprobation of the medical profession, yet there are tyros in them.
fro:petition who advocate its claims to truth. It needs no elaborate argument to disprove all such preposterous and absurd notions. I shall put it in silent contempt as not worthy of the slightest exposition.

Diagnosis

Is by no means difficult except in the first stage. And in this stage there scarcely need be a doubt, if there be much emaciation and a persistent cough with or without a mucous expectoration. If these symptoms cannot be accounted for by a loss of appetite there is just grounds to arouse our suspicions that the patient is laboring under the tuberculous diathesis. And should to these be superadded pains in the breast and between the shoulders accompanied by an increased pulse.
with general ability, we may view it as almost conclusive. In this condi-
tion should recent abscesses occur the matter is set at rest. The invaluable adjuncts of percussion and auscultation may be summoned to our aid, and will shed a halo of light in a dark place, in aspiring us in our diagnosticating efforts. On per-
percussion if there be much dulness of sound in the subclavicular region, and an unusual respiratory murmur, with much vocal resonance. Linked with the above symptoms our suspicions may be turned into affirmations. Dr. Bean is of the opinion that he has discovered a symptom vastly rich in diagnostic value: Which is tending on prepuce, with the finger in the anterior intercostal spaces, near their sternal extremi-
ties. With a judicious discriminations
Phthisis should not be blended with any other disease, bearing in all probability the greatest resemblance to bronchitis. Yet the physiognomy of bronchitis is quite different from that of phthisis, as well as quite different results may be obtained from the great interpreter—Causation.

Prognosis.

This is easy. In the great majority of cases it is most unquestionably unfavourable. Be it far from me or ascertaining that phthisis is always fatal. There are cases on record of Cures being effected or taking place spontaneously. While evidence from post mortem examinations is abundant, that at some period during the disease tubercle are capable of undergoing favourable modifications. Much may be expected from a well timed treatment.
Treatment.

The first indication is to prevent, if possible, or further dispensation of tubercles as they run their course when formed in defiance of skill or remedies. The predisposition should be corrected as far as possible, the lungs and system guarded from injurious influences. While the tuberculous diathesis consists in a pulling down of the general tone and vigor of the system with a depressive character of the blood, we should be careful to address suitable remedies for the restoration of the solids and connect all lesions of the circulatory system. These ends may be accomplished, in a good degree, by a free exercise in an open and pure air, protecting the patient by flannel next the skin, and woollen apparel warm and thick. Riding on horseback is a good mode of exercise. If a sportsman, let him take to the mountain.
The residence of the phthisical subject should be in a country of uniform temperature and dry. The interior of Georgia, Alabama, and Florida have been recommended as suitable. Sartaba, Cuba, South Eastern part of Spain, and the prolific Egypt have all enjoyed some notoriety. Sea voyages may be indulged in, though they should be short or else the fatigue will more than counteract the good effects. The Atlantic enjoys more renown than all other waters, probably on account of its more favourable climate. A residence near the seashore must be detrimental, notwithstanding the opinion of great lights to the contrary. I would have no scruples in directing a patient to leave such a locality and take up his abode.
in the interior where he would be
famed by the gentle zephyrs, rich
with fragrance of balmy flowers,
imregnated with the exhalations from
the tender foliage, amid the flavoured
beautiful pine forests. Many medi-
cines have been recomended in the
treatment of phthisis, some have proved
ephemeral, others have entered the frail
state of longeity and fallen into dis-
repute. Some have been puffed into notice
with the false claim of a specific, while
others only ask the mild appellation
of adjuvants. The diet must be looked
to by the physician. It should be nutri-
tious but not stimulating. It may
consist of farinaceous substances, egg,
oysters, fish, milk, and delicate meats.
At times fruits and vegetables may be indulged.
The special symptoms—haemoptysis, cough, pectoral pains, frequent pulse, night sweats, vomiting and diarrhoea, must be promptly met by the well-known remedies applicable to each case, which I have not space to mention. The tone and vigor of the system, at all periods, must be sustained. This may be accomplished by a faithful exhibition of cod-liver oil. It has done much for the alleviation of suffering humanity and deserves the appellation of the great life protractor.