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AN

INAUGURAL DISSERTATION

ON

Pneumonitis Per Se

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BY

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OF

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To

Thos R. Jennings M. D.

Professor of Anatomy

In the University of Nashville.

In admiration of the high attainments

Which have justly placed him

In the first rank of his profession.

This Thesis

Is respectfully inscribed

By

The Author

Pneumonitis Per se

Not that I expect in this dissertation to surpass those who have preceded me, or even describe this disease with that acumen or accuracy as those writers who are more experienced than myself, and whose locks are silvered over by the frosts of many winters. But it being customary and obligatory in all Medical Colleges for candidates for the degree of doctor of medicine to write an essay on some subject which pertains to medicine. is why I now make this feeble effort. And if these lines should be perused by our honored, learned and most worthy Professors, we hope they will make due allowance for the writings of a novice in the healing art; and also one who is not accustomed to wielding the pen

There are several varieties of this disease. The inflamation may occupy a considerable extent of the lungs. continuously embracing a whole lobe more or less. or even a whole lung. This is the general form of the disease, and is called simple pneumonia. The inflamation is more frequently confined to one lung, though it sometimes involves both, and in the latter case is denominated double pneumonia. In some instances however it seems to affect the air-cells, which is called vesicular pneumonia. The inflamation is sometimes found in the cellular tissues, which intervenes between the air vesicles, or between the lobules. and this is called intervesicular or interlobular pneumonia, most commonly it oc-

cupies all of the constituents of the parenchyma, which compose the pulmonary apparattus, the smaller bronchial tubes, the air cells, the intervening cellular tissue, and the vascular ramifications. There are three stages in acute pneumonia; 1st that of congestion 2nd that of inflammation and 3d that of suppuration. It generally comes on with a chill followed with fever, with a difficulty to breath, cough, and great pain in the side, or back part of the chest; sometimes the fever and local symtoms come on without the chill preceding, and sometimes the local symtoms go before the general ones. When fully developed it is known by fever quickened

breathing, pain in some part of the chest, cough and a scanty viscid expectoration frequently mixed with blood. This viscid and rusty colored expectoration is considered the best general sighn of the disease, and sometimes indicates the existence of pneumonia when the physical sighns fail. The position of the patient is most frequenly on the back, with the head and shoulders elevated, though the patient sometimes prefers lying on his side, when the plura is inflamed opposite to the affected side. Fever nearly always accompanies the disease, and in some cases constistates with increased frequency of respiration the only obvious affection. It varies

greatly in degree in some instances so mild as to scarcely be observable, and in other cases intensely high. It is frequently attended with flushed cheek and pain in the head, about the brows or forehead, which sometimes causes the patient to suffer more than from pain in the chest. The pulse is generally full strong and somewhat accelerated, but sometimes it is very frequent, and in the latter case it is apt to be smaller. Thirst and loss of appetite are almost universal. The tongue is commonly moist and coated with a white or yellowish white fur, but is sometimes clammy or dry and red. The physical sighns are of

very great importance in arriving at a diagnosis of this disease which is often very obscure; and before the discovery of auscultation and percussion many cases ran their whole course entirely unsuspected. Cough and pain are frequently absent, and fever with headache and frequent respiration which are common to this and many other diseases are the only phenomena observable. It sometimes happens that the symptoms of the viscid and rusty sputa fail. The patient sometimes swallows the matter expectorated as is the case with children, or there may be no expectoration; or the discharge from a predominance of

catarrhal or hemorrhagic affection may want the properties which characterize this sputa. In many of these cases percussion and auscultation together afford unmistakable signs of the disease. These however are not always sure, for it is sometimes the case that the inflammation occupies the interior of the lung and is surrounded by healthy structure. There is usually a slight diminution of the healthy resonance in the first stage, but not sufficient to serve as a diagnosis. In this stage auscultation is more decisive than percussion. By auscultation it may be discovered that the healthy vesicular murmur has given way to the crepitant rale,

though the vesicular murmur may sometimes be heard mingling fully with the crepitant rale, before it is entirely lost. The crepitation is heard during inspiration and very rarely if ever during expiration, and a full inspiration will frequently develope the crepitus, when not perceptible in the ordinary mode of breathing. Whenever this sound is heard it indicates inflammation in the pulmonary apparatus, and its progress can be traced with considerable accuracy by noticing the progress of the attendant sound. In some cases however this sound cannot be heard, even though the disease be noticed from the commencement. As the disease passes

into the second stage the crepitant rale is lost and no sound is heard. or only that of bronchial respiration which is one of the signs that characterises hepatisation The bronchial respiration is usually heard quite distinctly. and is loudest when the parts surrounding the larger tubes are inflamed as near the root of the lung In some ~~some~~ cases during the passage of congestion into hepatisation and before hepatisation is fully established the crepitant rale and bronchial respiration are commingled together. which produce a sound. that has been compared. as being analogous to that of the tearing of taffeta. Broncophany

is another sighn which characterizes hepatization. another important character of hepatization is the greater vibration of the walls of the chest. when the patient speaks or coughs, which is made sensible by placing the hands over the the affected part. Percussion is a very important sighn in this stage; instead of the slight diminution of clearness noticed in the state of congestion. there is a decided dulness and sometimes a complete flat sound in the parts most highly diseased. In some bronchial respiration and broncophony are absent, in consequence of obstruction at some point in the bronchial tubes entering the diseased portion of the lung. and then again they may be heard at one time. and

not at another in the same condition of the disease. This may be owing to obstruction caused by mucous. which ~~which~~ is removed when the sound returns, or it may be owing to some other causes. If the disease be arrested in the first stage the crepitant rale gradually ceases and the respiratory murmur of health returns, after the second stage has been established, and resolution of the disease takes place, the bronchial respiration and broncophony depart by degrees. and the crepitant rale returns. as a general thing however in a modified state and assuming the character of the subcrepitant rale in consequence of the secretion taking on a more fluid form. This sound gives way to the

vesicular murmur. and the return of this sound together with the healthy resonance by percussion is evidence that the lung is restored to health. Third stage or that of suppuration. It cannot be distinguished by the physical sighns, so long as the pus continues diffused throughout the parenchyma - presenting the same flatness on percussion, and the respiratory sounds are the same. However the presence of a mucous rale upon the bronchial respiration might in some instances lead to the suspicion; that the concrete matter, with which the cells are filled in the second stage has been replaced by the pus of the third stage. If an

abscess has formed and opened into the bronchia a gurgling rale is heard if the cavity contain liquid, and pectoriloquy with cavernous respiration, if it be empty. There is no special time after the commencement of the disease for the third stage to set in, usually it happens in the course of the second week, though sometimes in aged persons as early as the fourth or fifth day, and again in other persons not before the end of the third week. There is no certain sign by which the accession of the third stage can be distinctly known. As a general thing the difficulty and frequency of respiration is so increased that the patient has to lie with his

shoulders elevated, or maintain the half sitting posture; the pain diminishes and sometimes none; the expectoration is not so great or becomes purulent, or assumes the appearance of a dark turbid liquid or ceases altogether on account of the weakness of the patient, from which he is unable to cough up the matter secreted; the countenance becomes pale and haggard; the pulse very feeble and quick; the skin is bathed in a profuse and cold sweat, and death comes on after the rattling of accumulated mucous in the throat — the return to health is sometimes known by certain discharges, or some other sighn considered critical; as free perspiration diarrhoea epistaxis and hemorrhages

of various kinds. cutaneous eruptions especially. herpes about the lips. boils and abscesses are sometimes seen In double pneumonia the difficulty of breathing is generally much greater than when one lung is affected. the strength of the patient is more depressed and the countenance expresses more anxiety. The pain is often felt only on one side consequently the case is liable to be mistaken for single pneumonia. but the physical signs will always enable the practitioner to arrive at a proper conclusion. In some instances the inflamation is situated in the interior of the lung or at the mediastinum. so that it comes in contact with no portion of the external surface. The physical sighns

in those cases sometimes fail, from the fact that there is healthy tissue intervening between the ear and the diseased structure. When all the symtoms ordinarily. which are common to pneumonia are present including the viscid and rusty sputa. and excepting only the acute pain. and where percussion and auscultation fail to give any signs. we may conclude that the disease is in the internal part of the lungs. Pneumonia is somewhat modified when it occurs in individuals greatly debilitated by old age. In such instances there is frequently no acute pain and but little or no expectoration, and the matter that may be expectorated has not the appearance

of that in ordinary pneumonia. The only local symptoms by which it may be characterized are a little cough, dyspnoea and hurried breathing, with a little fever; and in some cases these symptoms are wanting. Great prostration, a small irregular pulse, sunken features, a pale or livid complexion and a certain degree of mental derangement, may usually be noticed, but does not afford sufficient data for a sure diagnosis. The crepitant rale is apt to be obscured by mucous sounds, and bronchial respiration from the same cause is less distinct; but the dulness on percussion, taken in conjunction with the other signs, will be sufficient to characterize the disease

The treatment in this disease should generally be antiphlogistic - if arterial action be very high bleed the patient sufficiently to reduce the pulse, or it may be carried as far as syncope. There are three great antiphlogistic sedatives in this disease. Calomel, Tartaremetic, and Digitalis. Give in combination Calomel and Jalap each ten grains, and one grain of Tartar-emetic; and after this has acted well, take mucilage of Gum Arabic one and a half ounces. Digitalis ten drops, and Tatar-emetic 1/6 of a grain - give this night and day every four hours. During this time administer to the patient small doses of Calomel until convalescence takes place -