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DISCUSSION.

DR. S. SOLIS-COHEN of Philadelphia—It has been my fortune to meet with two cases of the affection so well described in the paper, and to find in one of the cases a little more difficulty in discriminating the case from acromegalia than either my reading or the paper just laid before us this afternoon would seem to indicate. The point, however, upon which from further reading and from a study of these cases I would be inclined to lay greater stress, is the broadness of the hand in acromegalia, as contrasted with the length of the terminal phalanges in hypertrophic osteoarthropathy. In both instances under my notice there was associated chronic pulmonary tuberculosis in aged subjects. It is quite common, however, to meet with kyphosis, and with the hippocratic finger-nail in these subjects, especially in the debilitated and poverty-stricken people whom we meet at the Philadelphia Hospital, and I have thought that the affection discriminated by Marié and described this afternoon by Dr. Davis, is after all, as I think is Dr. Davis's opinion, merely an expression of a commonly encountered condition. If we were to class as pulmonary hypertrophic disease of the joints every case of empyema, or other suppurative thoracic affection which is associated with thickened terminal phalanges, with curved parrot-beak finger-nail, and so on, I think I could show two or three dozen cases at a moment's notice. Therefore, I would lay stress upon the involvement of the wrist and ankle joints before consenting to the diagnosis of this condition, which is again a further point of discrimination from acromegalia, in which the wrists and ankles as a rule are not affected. The condition is one of extreme interest, forming as it does one of the great group of affections to which clinical attention has so lately been directed, namely, the trophic results of chronic toxemias. I use these large expressions, which are somewhat vague, for the reason that I have not yet determined, or I think are we in a position to ascertain just what the toxemia is, and just what the exact pathologic and etiologic relation of the affection is. Still, it is trophic, in so far as it is a disturbance of normal secretion, leading to excessive development of certain structures at the expense of others. In these cases there is excessive development of the bony tissues, in rheumatoid arthritis also development of the bony tissues with destruction of others involved in acromegalia, excessive development of subcutaneous tissues in myxedema. Here we have a large group of cases of perverted trophic conditions. That all will be shown to be due to some error in embolism will hardly be doubted. The evidence seems to prove that in this case it is some toxin, developed from the presence of pus within the body, whether that pus be formed in one disease or in another. I have listened with great interest to Dr. Davis's paper, and have learned a great deal from it.

DR. DAVIS—At first I was somewhat in doubt as to whether this was not a case of acromegalia with which I had to do, because of the enlargement of the hands and feet, and also because of the dull expression of the patient, broad face instead of an oval one, and some thickening of the lips. It was perfectly evident, however, on careful examination that there was no enlargement of the jaw so characteristic of acromegalia. There was the characteristic enlargement of the terminal phalanges, but no increase in size of the bottom of the hand itself, and no broad thickening of the outside bony tissues. The diagnosis was thus made clear in this case as one of pulmonary hypertrophic osteoarthropathy. Upon these features we have to depend in making our diagnosis.

MEASURES CALCULATED TO MODIFY ACUTE INFLAMMATIONS OF THE RESPIRATORY TRACT.

Read in the Section on Practice of Medicine, at the Forty-sixth Annual Meeting of the American Medical Association, at Baltimore, Md., May 7-10, 1895.

BY H. B. SEARS, M.D.

BEAVER DAM, WIS.

No single remedy or measure can always be relied upon to afford relief in any acute disorder, as the disease itself is often but a climax in a pathologic process, the divergent lines from which, radiate to a series of inherited or acquired causes; the most important of which must receive consideration of him who would stay the process of disease or assist nature in restoring to health.

Undoubtedly there are many measures utilized in therapeutics, identical in effect; also more than one way by which a pathologic process may be turned to a healthful issue.

We find ourselves to-day confronted with quite a number of methods for treating acute respiratory troubles; each of which, undoubtedly, possesses merits peculiar to itself and well adapted to meet certain indications which arise in these affections; but that any one remedy or means can fulfill all the indications or be applicable in every case could not be claimed, much less substantiated. One becomes expert in the use of a remedy or measure the same as in a certain surgical procedure; and one may also become blinded to the defects of a remedy or measure because of over-confidence in the same. We can only become right eventually by comparison of thoughts and experiences.

One urges us to use cold water locally or generally, one pilocarpin, another digitalis, others strychnia; another values hypodermoclysis; still others urge the expectant plan of treatment, combating a symptom here and there as it appears too prominent, asserting there is no way to shorten the inflammatory process and that the physician's duty is to watch, but act *only* when positive indications arise.

The writer desires to call your attention in a general way to conditions found in asthenic cases, prostrated with acute respiratory inflammations. Infancy and old age claim the larger share, but all ages furnish us with examples. Reference is made to the whole respiratory tract, because all parts suffer more or less in common, and treatment for one part is not wholly inapplicable to the rest of the tract; weakness or vigor having their respective influence upon the whole tract much the same. The intention is to look at the subject from a normal anatomic and physiologic standpoint, noting the variations in local nutrition and elimination and instituting treatment, in part influenced by the conditions existing just previous to the onset of the acute inflammation, and taking into consideration microorganisms or their chemic products only so far as defective nutrition in a part offers to them a suitable feeding and propagating ground.

All but a small percentage of the deaths in acute respiratory inflammations result either from excessive secretion of mucus or heart failure. These facts led the writer to look for prompt means of checking secretion in the respiratory tract, also those calculated to bring about the best possible heart action; appreciating the fact that not only healthy tissue metamorphosis but also the excessive changes occur-

ring during the inflammatory process are much influenced by the condition of the heart and capillary circulation. Every practitioner of experience has, probably, been impressed with the tenacity with which bronchial catarrh clings and the slowness with which resolution takes place in the lungs of subjects having a sluggish circulation. We have of these two main classes: first, the spare or poorly nourished in whom vitality is generally low and with whom the matter of nutrition is the subject of all importance, everything else being secondary thereto; second, a class not feeble in appearance, for they look full blooded and well nourished, but when your finger touches the pulse you perceive it is small and rapid. They are short of breath and a degree of cyanosis is present in the extreme cases. You may discover a heart murmur and you may not. Râles may be heard here and there over the lungs; quite frequently even when they feel their best. They have great thirst and demand large quantities of cold water, or something else, to quiet the inward burning. We will not go into further detail or speculate as to the different lesions which may have brought about an approximate of this condition. They are not confined to any age or condition in life. The defect in the power of the heart (from whatever cause) has brought about varying degrees of blood stasis, so that the venous system and lymph channels can not unload themselves nor remove the transudation which has occurred into the tissues of the lung. Elimination is much interfered with as well as nutrition. In these cases pilocarpin would be dangerous and heart stimulants alone would, ordinarily, fail to accomplish the desired results. The too common advice to give your fever patients an abundance of cold water (in these cases above all others) would, in the writer's opinion, but make their death more sure.

This condition, against which we are striving, is begotten of a feeble heart and an over-abundance of fluids, which, on account of the lack of tone in the circulation fails to be thrown off by way of the kidneys. Heart stimulants alone might relieve the edema of the tissues by unloading the distended veins and lymph channels, provided the condition of the heart would allow that degree of forcing, but there would be great danger of exhausting or injuring it before the work was accomplished. What seems to be needed first in these cases is depletion, not with the lance (although that might be a successful measure), but by catharsis, vigorous in proportion to the degree of stasis and depletion needed. Then the heart stimulants or tonics will work like a charm, diuresis will be induced and the dilated veins and lymph channels can easily be brought to an approximately normal condition, relieving the tissues of surplus serum and waste products. Then the exhibition of remedies lessening secretion in the respiratory tract, together with those having a tonic effect upon the vascular and nervous systems will, as general measures, do much to avert the dangers which await adynamic cases prostrated with bronchial and pulmonic inflammations.

If this is done we feel that the advice favoring the use of emetics in children and the lance in adults when dyspnea and cyanosis supervene, will not often be needed. By emesis we temporarily relieve the collection of mucus, but excite renewed secretion, very likely necessitating a repetition of the dose, each time increasing the fatal tendency. By bleed-

ing, some of the resistance to the weakened heart is removed, together with waste products, also valuable corpuscular elements of the blood, which will be sorely needed in convalescence should that stage be reached. All of this could be more safely and as surely accomplished by derivation by way of the bowels and kidneys, and the exhibition of heart stimulants and tonics, without the loss of valuable tissue elements.

The condition of the heart and capillaries should determine the use of heart stimulants as well as the efficiency of elimination; also the amount of fluids which the case will bear. When heart tonics are most indicated abundant fluids, most certainly, are not.

Ingestion of fluids does not of necessity increase tissue change or elimination. With a vigorous circulation the ingestion of water may flush emunctories, assisting greatly the throwing off of waste products; but if the circulation be weak, the accumulation of fluids in the body tends still more to embarrass the already failing heart.

Julius Glax made special observation in fifty-three cases of fever, endeavoring to determine if the human body retained water in the tissues during fever or is deficient in water. The amount of water ingested was noted, also the amount of urine passed (cases in which diarrhea was too free were excluded). He concludes that there is a conservation of water during fever, with an increased elimination in convalescence. His explanation is, that at the onset of the fever while the blood pressure is yet high, the diuresis occurs, but a diminution ensues as the pressure becomes lower and a still later increase as strength returns. An increase in the ingestion of fluids increases the elimination in most cases *only* after defervescence has begun, while during the height of the fever, diuresis appears to be more favorable the more limited the ingestion.

The writer would offer, as applicable in many cases of acute respiratory inflammation, the prompt exhibition of belladonna and turpentine for the purpose of abridging or modifying the local process. They have seemed to prevent excessive secretion of mucus in bronchitis as well as lessen the amount of exudation in lung inflammations; and, in conjunction with an effort to maintain the best possible circulation of the blood, have yielded results which encourage the writer to bring the subject to your notice.

In the early stage of respiratory inflammations, before excessive secretion begins, they seem to soothe the mucous surfaces and prevent much trouble. If secretion is already considerable, derivation by way of the bowels, together with the toning up of the heart will enable them to check the secretion of mucus, prevent accumulation in the dependent portions of the lung, or extension of the inflammation by contiguity. In children and feeble subjects this is a matter of no little importance.

Digitalis, as a type of heart stimulants occupies a very important place among the remedies utilized in combating respiratory inflammations, but it should not be forgotten that observation indicates that with high temperature or edema it is not absorbed, or, at least, is ineffectual until the temperature is reduced or the edema somewhat relieved by purgation. An additional advantage of the above mentioned plan of treatment, is that anodynes and antipyretics may be given with greater safety when indicated.