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SOME DIFFICULTIES IN THE DIAGNOSIS OF CARDIAC DISEASES.*

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THE diagnosis of most diseased conditions of the heart seems at the first glance comparatively easy, provided one has had the average training and experience in such conditions. A more careful study of the subject, however, reveals difficulties which are not commonly recognized or certainly are not recorded in the text-books, and which should be known to every practitioner. My notes upon cases of derangement of the heart observed during the past fourteen years are in many instances, to me at least, very interesting, and from these I have selected a few abstracts which, while only serving to indicate in a sketchy and imperfect manner some of the difficulties to be met with, may yet suffice to direct further attention to the subject.

To the superficial observer the presence or absence of a cardiac murmur is sufficient to determine the abnormal or

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the normal condition of the heart, but it is well known that the presence or absence of a murmur is only one element in the diagnosis. It is not generally known, however, that a murmur may be evanescent. The common belief is that a murmur once developed must be present continuously as long as the morbid condition which gave rise to it persists. This is not the case. A murmur may, and frequently does, appear and disappear and return again within a very few hours. Such evanescent murmurs are most commonly due to functional derangements of the heart, but they are also observed in connection with well-marked valvular lesions. This evanescent character of a valvular murmur was first brought to my notice in 1880, when I was an interne in the Roosevelt Hospital. A woman was admitted with a greatly dilated heart, but no valvular murmur. The house staff made frequent examinations of her heart, and after several days a systolic apex murmur was detected. The attention of our attending physician, a gentleman of distinguished ability in diagnosis, was directed to this murmur, but he disconcerted us by stating that he did not hear it. It was one against three; but it was one trained physician against three beginners, and we thought that we must have been mistaken. The examination of the patient's heart, which was instituted the moment the attending physician had left us, failed to reveal a murmur, but the next day the murmur returned. Again our attending physician failed to hear it. Happily on the third day we caught the murmur at the right time and our attending physician confirmed our diagnosis. A subsequent autopsy revealed a very marked insufficiency of the mitral valve. That case set me to thinking. Why was the murmur inconstant? It could not be on account of the weakness of the cardiac muscle, for the heart was beating with equal strength both when the murmur was heard and when it was inaudible. I

was inclined then to believe that the fault lay in our own ears, which at times were too dull to detect faint sounds ; but I have since become convinced that this is not the case. Murmurs vary more than ears. The reason why they vary—except in those cases where there is temporary variation in the force of the heart's action—is no more clear to me to-day than it was then. I have since met with many instances of cardiac disease in which a murmur could be heard at one examination and not at the next. It would seem that such variation in the cardiac murmur must occur only when the murmur is feeble in intensity ; but this is not so ; a loud murmur will often be observed to come and go. This noteworthy fact will frequently explain the discrepancy in the opinion of different physicians in regard to the same case. An interesting example of this difference of opinion occurred in connection with the application of one of my patients for life insurance five years ago.

A gentleman, aged twenty-eight years, of nervous temperament and slight physique, applied to one of the prominent life insurance companies of this city for a risk upon his life. He first came to me for a physical examination. As I had had an intimate medical knowledge of him for the previous three years, I assured him that he would have no difficulty in passing his examination ; but to satisfy him I made a *careful*, not perfunctory, examination of his heart and lungs and of his urine. There was not the slightest evidence of anything abnormal, except that his pulse rate was a hundred. The heart sounds were clear and distinct and the heart was not enlarged. Knowing my patient's nervous temperament, I attributed his rapid heart action entirely to excitement, and I cautioned him to get the examiner to count his pulse before subjecting him to a general examination. Three weeks later he came to me and said that his application had been refused. Three examiners had listened to his chest and then declined his risk on account of "something wrong with his heart." I was surprised, for I knew the gen-

tleman had no organic disease, and I proceeded to examine his heart again. My ear had hardly touched the chest wall before I heard a particularly loud systolic apex murmur. After explaining to him that there was no cause for alarm I directed him to report to me for examination once a month. I found that this murmur was sometimes present and sometimes absent, sometimes loud and sometimes very feeble. But up to a year ago, when he left New York, he never had a symptom of derangement of the heart, nor was there any increase in the size of the heart.

During the past year I have had, and have still, under frequent observation a dispensary patient who, in addition to a well-marked aortic diastolic murmur, has a systolic apex murmur which is at times so loud as to be recognized by all my students, and yet on the following day it is frequently entirely inaudible.

Last summer there was admitted to the Roosevelt Hospital a man with unmistakable *chronic* fibrinous pericarditis. The characteristic "to-and-fro" murmur of pericarditis was so loud that it could be recognized at once either by the ear or the stethoscope. Yet that murmur would be found to disappear and reappear from day to day or even from hour to hour. In addition to this a blowing systolic endocardial like murmur would occasionally be heard to the left of the situation of the apex beat.

Another source of error in the diagnosis of cardiac disease is the curious fact which is, I believe, almost altogether overlooked, that some murmurs are heard only by the unaided ear and are inaudible to the stethoscope, while some are inaudible to the ear and are heard with great distinctness by the stethoscope. This curious characteristic of murmurs may be noticed in any form of valvular disease, but it is most common in connection with the murmur of aortic regurgitation. This murmur, whether feeble or loud, is sometimes only heard by the ear *and not* by the stethoscope, while in other cases the murmur can not be

detected by the ear alone, but is quite loud when heard through the stethoscope. I have no explanation to offer in regard to this peculiar phenomenon, but the fact is unmistakable. It will readily be seen how important it is that this should be recognized, for if the heart be acting regularly and an examination be made with the stethoscope alone the heart sounds might appear absolutely normal and thus a most serious valvular disease would escape notice. I make it an invariable rule in cases which admit of the least doubt to listen both with my ear and with the stethoscope. If there seems to be every reason to believe that the heart is healthy, I think it better to listen with the ear alone than with the stethoscope alone.

The fact that murmurs do not always confine themselves to their regular areas is still another source of error. We naturally expect to find the murmurs of aortic valvular disease in the neighborhood of the second intercostal space to the right of the sternum, or over the upper portion of the sternum itself; but this is not always the case. The murmur of aortic regurgitation, particularly, is often heard *only* over the ensiform cartilage, and the examiner who forgets this possibility may readily be deceived by listening only over the upper portion of the sternum, and, if he there hears a clear second sound, he may readily make the mistake of believing the aortic valves to be healthy. It must also be remembered that the murmur of aortic regurgitation may occasionally be heard at the apex of the heart only. A murmur heard in the neighborhood of the second intercostal space to the left of the sternum may indicate disease of the pulmonary valves or of the pulmonary artery; but disease of the right heart is so rare in the adult that it is hazardous to make such a diagnosis. The true condition is usually disease of the aortic valves or pressure upon the pulmonary artery. I ventured the diagnosis of disease of

the pulmonary valves in a patient whom I saw this past summer at Bellevue Hospital, my reason for the diagnosis being the fact that she had the symptoms of malignant endocarditis, together with a loud, harsh systolic murmur, heard with greatest intensity over the situation of the pulmonary valves, while hardly any murmur could be heard over the aortic area. It is well known that malignant endocarditis, unlike rheumatic endocarditis, may attack the right heart in the adult. There seemed good reason to believe, therefore, that the murmur was produced in the pulmonary orifice. The autopsy showed that I was mistaken. There was malignant endocarditis, but the disease had involved the aortic valves, while the pulmonary valves were intact. In a like manner we may be embarrassed or deceived by the situation of the murmur of mitral stenosis. We are told that this should be heard only at the apex of the heart, but it is often inaudible at this point, and is only heard in the third intercostal space to the left of the sternum. I have also heard this murmur in the axillary region, considerably to the left of the apex beat, and nowhere else, and I have observed a harsh systolic murmur over the pulmonary orifice in a case which autopsy showed to be mitral stenosis.

Five years ago I was very much puzzled by hearing a double murmur over the situation of the liver. A man applied to the Medical Clinic of the College of Physicians and Surgeons for relief from the ordinary symptoms of heart disease. The peculiarity of his case consisted in the absence of any signs of enlargement or disease of the left ventricle, while the area of cardiac dullness to the right of the sternum and between the fourth and sixth ribs was considerably increased. A distinct, but not loud, double murmur was heard over the same area, but with its maximum intensity in the fifth space and the nipple line, or seemingly over the liver. Dr. Delafield's brilliant diagnosis of a small aneurysmal sac having its origin just above the

aortic valve and projecting downward was confirmed by autopsy some two years later.

The fact that the presence of a murmur does not necessarily indicate valvular disease is generally recognized; but as too many physicians still regard a cardiac murmur and heart disease as synonymous terms. The subject is too extensive to be adequately dealt with within the limits of this paper; but it will be sufficient to call attention to the case, before mentioned, of the gentleman who applied for life insurance and was rejected on account of a mitral systolic murmur. During the five years since that murmur was discovered there has never been the first symptom of derangement of the heart's action, and there has been no increase of the size of the heart or other sequelæ of valvular incompetence. It is not uncommon to discover cardiac murmurs in patients who have never experienced the slightest symptom of derangement of the heart's action, and in many of whom no evidences of hypertrophy or other compensation can be found. The experience of examiners in life insurance will confirm this statement. A little leakage through a valve by no means destroys the efficiency of the valve, and, in the absence of evidence of progressive endocarditis, such cases should not be regarded as true heart disease.

The difficulty of diagnosis in cases of cardiac disease without a murmur is much greater. This applies particularly to disease of the aortic valves, or of the aorta just above the valves. The diagnosis of the dilated heart, or of cardiac weakness, is comparatively simple, since in these cases we have direct evidence of the failure of the cardiac muscle, and the presence or absence of a murmur signifies but little. Well-marked stenosis of the mitral orifice or of the aortic orifice, though often unattended by its characteristic murmur, is usually recognized without much difficulty. The class of cases of which I wish to speak particularly is

that in which there is either atheroma or thickening of the aortic valve with atheroma of the aorta, or there is atheroma of the aorta in the neighborhood of the orifices of the coronary arteries without involvement of the aortic valves. The difficulties in the diagnosis of some of these cases is very great indeed, and yet they should be recognized if possible, since the prognosis is of the utmost gravity. It is a condition which occurs in New York more commonly than is generally known, and more especially among the upper classes. Most of my cases have been men of middle age, who have been in active business for many years, and who have worried over their business. These men complain for a considerable length of time of "dyspepsia"; then they have painful sensations about the heart, then palpitation of the heart, and, finally, dyspnoea on exertion. They are liable to sudden death, usually with symptoms of angina pectoris. In some cases the diagnosis is comparatively easy, but in others it is very difficult indeed. Two years ago two gentlemen put themselves under my care at about the same time and with very similar symptoms.

Each was over fifty years of age, and each was in active business. The first patient had suffered for several years from palpitation of the heart and flatulence, and these symptoms had distressed him so that he had lived for a year on a diet of hot water and chopped beef, but without material benefit. At the time he came to me he was building a house, and he found when he ascended the steep temporary stairs that he was short of breath, and that, as he expressed it, "there was a devil under his breast bone." Careful physical examination revealed an intermittent but strongly acting heart, a clear first sound at the apex, while no aortic valve sound could be heard. There were no murmurs. The apex beat was in its normal position, but auscultatory percussion showed the heart to be unquestionably enlarged. There was no increase of arterial tension and no

renal disease. Several subsequent examinations showed that the aortic valve sound was persistently absent. There never was a murmur. Here, the enlargement of the heart and the absence of the aortic valve sound, the attacks of pain and dyspnoea on exertion, and the location of the pain under the sternum, rendered the diagnosis of disease of the aortic valve and of the aorta very probable, and the bad prognosis was confirmed by his sudden death with symptoms of angina pectoris a year later.

The second patient had suffered for a long time from flaut-lent dyspepsia and an intermittent heart. For about a year previous to the time that he consulted me he had suffered from attacks of asthma and bronchitis. He was very nervous about himself, and especially in regard to his heart. He had taken many drugs.

Examination of his chest showed that he had moderate emphysema of the lungs. His heart was intermittent but fairly strong; all the valve sounds were normal, and auscultatory percussion showed no increase in the size of the heart; the apex beat could not be felt. There were no murmurs. Subsequent examinations revealed no change in these signs. There was no increase of arterial tension and no renal disease. This case I regarded as just the opposite of the former one. I considered his cardiac symptoms to be entirely functional, and I believed that his attacks of asthma were due to his emphysema superinduced by reflex conditions from his stomach. I gave an absolutely good prognosis. I stopped all medicine except some iodide of potassium and told him to go back to his business instead of spending his time in bed, as he had been doing. Within two weeks he improved wonderfully, and after about six weeks he came into my office one day to tell me how well he felt. His heart was regular; he had had no asthma for some time, and only complained of some shortness of breath on active exertion. The next day, while ascending the stairs of the elevated road, he complained of pain under his sternum, and then almost fainted. He was assisted to a neighboring drug store. When he sat for a moment, a small quantity of blood gushed from his mouth and he died. I could not obtain an autopsy, but I be-

lieved that all his symptoms were due to an aneurysm of the arch of the aorta.

I had been misled by the nervous character of the individual, which had induced me to underestimate the severity of his symptoms, and since to this was added a heart normal in size and strength and with absolutely no change in the valve sounds, I was completely deceived as to his true condition. The following is a typical case :

Last spring a gentleman was sent to me by his son, who is a physician, for advice as to the condition of his heart. He was sixty years of age; he had always been remarkably healthy, and he was a very active and hard worker. His only discomfort was an occasional attack of "biliousness." He considered himself perfectly well at this time, and he had only come to me to please his son. In 1892 his son noticed that there was an exaggerated heart action, and about the same time it was noticed *that there was some little difficulty in breathing on ascending many stairs. Just before I saw him he had applied for an increase of life insurance, which was denied him, because, he said, his pulse rate was ninety to the minute. He denied to me that he ever felt ill except for some dyspeptic symptoms, and occasional attacks of slight pain running down the left arm. I found distinct hypertrophy of the heart, a very feeble aortic valve sound, and no cardiac murmurs. At that time there was no increase of arterial tension, but there was some thickening of the radial artery. The pulse was slightly intermittent. There was no renal disease. The age of the gentleman, the enlargement of the heart, and the feeble aortic valve sound, together with the pain running down the arm and the thickened radial arteries, led me to give a very unfavorable prognosis. Subsequent examinations both by his son and myself failed to reveal a cardiac murmur, but after three months a moderate increase of arterial tension developed, and he complained of dyspnoea and discomfort after eating, which was relieved by eructations of gas. He continued at his business and insisted that he was perfectly well. On the evening of December 17th he suffered

from dyspnœa on exertion, having to rest four times in walking half a mile, and he reached home exhausted. After a few minutes' rest he ate heartily and his symptoms disappeared. He retired to bed at 11.30 P. M. About 1 A. M. he complained of dyspnœa and pain in the region of the heart; there was eructation of gas and there was profuse perspiration. The pain and oppression became intense, and he died at 1.30 A. M.

It will be seen that these cases do not resemble angina pectoris except at their termination, and that for a considerable period before death the symptoms are slight or obscure. It seems to me that the most significant signs of this condition are enlargement of the heart and an absence of the aortic valve sound, or a feeble aortic valve sound, though both these signs may be absent.

Still another source of error in the diagnosis of heart affections is to be found in the estimation of the size of the heart. Many hearts have undoubtedly been regarded as diseased which were absolutely healthy, simply because the apex beat was farther from the median line than is commonly the case, or because percussion revealed a larger area of cardiac dullness than the books would lead us to expect. In the beginning of my experiments in auscultatory percussion I believed that I had discovered a number of enlarged hearts, and I was disposed to criticise those gentlemen under whose care the patients were for not observing the enlargement of the heart, or for not discovering the nephritis or other cause of the enlargement. Further investigation showed me that these hearts were only of normal size, and that I must modify my preconceived ideas of the size of the heart as revealed by percussion. The left border of the heart is, in the healthy individual, much farther to the left than is usually supposed. It is commonly regarded as being about a quarter of an inch to the right of the left male nipple, and it is believed that much in-

crease of the area of dullness beyond that point indicates enlargement of the heart. As a matter of fact the line of the left border of the heart usually runs through the areola of the male nipple and often to the left of the areola of the nipple. Repeated examinations of the size of the heart by percussion and by palpation of the apex beat have convinced me that the latter is the more reliable method of estimating moderate increase in the size of the heart; but even here the opportunities for error are numerous. The general rule is that the apex beat in the healthy adult heart is to be found an inch to the inner side and two inches below the left nipple, and that an apex beat below that point or further to the left indicates that the heart is either enlarged or displaced. This is, however, a very poor rule, for, in the first place, even the male nipple is subject to great variations in its position, both vertically and as regards the midsternal line; and, in the second place, the heart itself is movable in the chest and the apex may occupy different positions at different times, depending upon the position of the body. I have frequently felt my own apex beat, while lying upon my back, within the nipple line, and then, upon turning upon my left side, I have felt it half an inch to the left of the nipple line. It is better to estimate the distance of the apex beat to the left of the midsternal line than to compare its position with the nipple. Such apex beats may be found in the healthy adult male in the erect position—from two inches and a quarter to four inches and a quarter to the left of the midsternal line, depending upon the size of the individual and the degree of development of the chest. When the apex beat is found to be four or more inches to the left of the sternum it might be outside of the nipple line, and if the heart's action were excited it might easily be mistaken for a hypertrophied heart. The knowledge that the heart's apex may normally be found

beating to the left of the nipple line should save us from the error of a hasty diagnosis of cardiac disease in the absence of distinct symptoms of cardiac derangement.

In many cases the question as to whether a heart is to be regarded as enlarged or not is by no means a simple problem, and its solution must be sought through a process of rational deduction, rather than by the direct evidence of physical examination.

I have observed in a few autopsies an error much more difficult to eliminate—namely, decided hypertrophy and some dilatation of the heart, without any displacement of the apex beat to the left or downward, and without increase of the area of cardiac dullness. Such cases are those in which the hypertrophy has developed especially in an antero-posterior direction, and, though the heart is enlarged, such enlargement does not reveal itself upon the surface of the chest. The obvious lesson from these cases is that in connection with well-marked symptoms of heart disease, either with or without murmurs, the apparently normal size of the heart should not affect our diagnosis. It should also be borne in mind that we may have marked valvular disease without enlargement of the heart.

Attacks of palpitation or of intermittent heart action are commonly regarded by the laity, and sometimes by the physician, as indicative of heart disease; but it is well known that most of these cases are merely functional disturbance of the organ, and that in the absence of signs of enlargement of the heart, or of failure of the heart muscle, together with the presence of normal heart sounds, we can almost always make the correct diagnosis. But that such is not always the case is shown by the history of the gentleman cited above, who died suddenly from the exertion of ascending the elevated railroad stairs. In conditions of mitral stenosis especially, we are liable to fall into

the error of regarding the palpitation of the heart and the irregular pulse as due to functional causes alone, since in connection with grave obstructive lesions of the mitral valve there is frequently no obvious enlargement of the heart and no murmur. In cases of doubt we must delay a positive diagnosis until we can assure ourselves of the presence or absence of signs of venous congestion or other evidence of failure of the normal circulation. Cases of functional derangement of the heart often assume startling and serious forms, and yet the prognosis is almost invariably good.

I have had under my care for the past twelve years a lady, now well on in years, who has suffered for over twenty years with attacks of very grave intermittence of the heart, often attended with syncope, but to-day she is without a sign of enlargement of the heart or murmur, or any evidence of failure of the heart muscle.

A young married lady had had several attacks of rheumatism, and following her first attack, ten years ago, she became subject to attacks of palpitation of the heart and syncope. She was told by two physicians that she had heart disease, and she was very apprehensive of her condition. She came under my professional care three years ago. I had known her for many years, and I always understood that she had heart disease, but I also knew her to be of a very active, emotional temperament. The knowledge of this latter fact, combined with the result of repeated examinations, which revealed a heart normal in size and action, with clear heart sounds, normal in every respect except for a slight prolongation of the first sound at the apex (which was undoubtedly due to the rubbing of the apex against the chest wall), and the fact that she had gone for ten years without dropsy or other signs of venous engorgement, enabled me to disregard the rheumatic history, and to express the positive opinion that there was no organic disease of the heart. The result has thus far justified the diagnosis, for she has given up the idea that she is an invalid, and for the last two years

she has been entirely free from symptoms of cardiac derangement.

Some cases which are regarded as merely functional palpitation of the heart are undoubtedly examples of adherent pericardium, since this latter condition is perhaps the most difficult to recognize of all diseased conditions of the heart. Adhesions between the two layers of the pericardium are frequently discovered at autopsy, although they had not even been suspected during life.

It would seem that the secondary congestions resulting from a dilated or weak heart would invariably be referred to their proper source; but it is easier to overlook this than one would at first suppose. Cases of acute dilatation of the heart without endocarditis are those which are most liable to lead one into error. Here the symptoms of interference of the functions of the stomach and liver may assume such prominence as to entirely overshadow the breathlessness and palpitation which would otherwise direct our attention at once to the heart, and even though the heart be examined the absence of a murmur and the absence of a rheumatic history may entrap the unwary.

My attention was once directed by a physician of ability to a man who had suffered from jaundice for over a year and in whom the liver was found to be considerably enlarged. The history which had been obtained was purely one of derangement of the functions of the liver and stomach. A physical examination of his chest revealed a dilated and hypertrophied heart without evidence of endocarditis, and a few questions developed the fact that he had been taken with breathlessness at the same time that the jaundice appeared, and that some six months before dyspnoea and palpitation became so severe that he could not work or undertake any active exertion. He had, however, not thought much of these symptoms, but was much distressed by his jaundice and dyspnoea. Calomel and alkalies

had failed to relieve, but rest in bed and cardiac tonics reduced the size of the congested liver and relieved all his symptoms.

The cases of atheroma of the aorta before referred to are often attended by symptoms of flatulence and other disturbances of the stomach, and so are liable to mislead us.

In some cases the symptoms are almost purely those of disease of the lungs, and we may be led into error by the absence of anything directly pointing to disease of the heart or aorta. This is particularly so in connection with a small aneurysm of the first portion of the aorta, which, giving no symptoms or physical signs in itself, may by pressure upon a bronchus produce cough and attacks of asthma. It is only by a complete system of exclusion that the correct diagnosis can be inferred, and then it is, of course, an inference only, and not a certainty.

Four years ago I saw in the wards at Roosevelt Hospital a man whose symptoms were those of emphysema of the lungs and a very intense general bronchitis. He had frequent and severe attacks of asthmatic breathing, which I at first attributed to the severity of the bronchitis, but though the bronchitis cleared up the attacks of asthma continued, and even increased in severity, and I therefore suspected and looked for signs of an aneurysm of the arch of the aorta, but without result. I had him under observation for nearly two months, but could find no definite explanation of his asthmatic attacks. The attending physician who followed me also suspected aneurysm, but could find no definite signs of this condition. The patient died suddenly and an autopsy revealed an aneurysm of the ascending arch of the aorta and pressing upon the right bronchus.

In this connection the society will remember the case which I reported a year ago of the man in whom, without symptoms characteristic of anything in particular, physical signs of fluid in the left pleural cavity were found, and when the chest was aspirated a large quantity of bloody

serum was withdrawn. It will be remembered that no explanation could be found for the presence of blood in his pleural cavity, or even for the presence of a pleurisy. His sudden death made what was before very obscure perfectly plain. The autopsy revealed an aneurysm of the descending arch of the aorta and an old rupture through the lung into the pleural cavity. This rupture had become filled up by fibrine and the leakage stopped, till rupture occurred at another point and he died. In this case there was nothing upon which to base even a suspicion of aneurysm. His only symptoms were those of pleurisy with a bloody effusion.

Finally, cardiac disease may be overshadowed by acute disease of the lungs or by general diseases. This applies particularly to malignant endocarditis. Here the fever and erratic chills are liable to be referred to other sources than the heart, and that organ is overlooked, or the disease is mistaken for malarial poisoning. The presence of a cardiac murmur and the purpuric eruption, or other evidences of hæmorrhage, will usually direct attention to the true nature of the disease, but these signs may be absent. I had a case at the Roosevelt Hospital last summer which illustrates this point.

A patient was admitted with signs of consolidation of the lower lobe of the right lung. It was then noted that there was a soft systolic apex murmur, but there was nothing else to indicate disease of the heart and the murmur was disregarded. When I saw him he had been under observation a month or more, and the signs of consolidation of the lung had not diminished. Three weeks previously he had begun to have very great fluctuations of temperature; the temperature would rise to 105° or 106° in the evening and then fall nearly to normal in the morning. There was also considerable sweating. I heard no cardiac murmur, and in the presence of distinct evidence of involvement of the lung the idea of disease of the heart never

occurred to me. The diagnosis seemed to me to lie between an empyema, an abscess of the lung, and acute tuberculosis of the lung. Several deep explorations of the lung with an aspirating needle failed to discover pus, and the examination of the sputum failed to reveal the presence of tubercle bacilli. He died one week later, and the autopsy revealed an unresolved pneumonia and very marked malignant endocarditis, with vegetations upon the tricuspid, mitral, and aortic valves—a condition which would seem impossible to occur without the presence of loud murmurs.

I believe that such murmurs must have been audible most of the time, and that had I examined the heart subsequently to my initial examination I must have heard them. An analysis of a number of cases of heart disease occurring in the wards of Roosevelt Hospital in which vegetations upon the aortic and mitral valves were shown to be present by post-mortem examination demonstrates, however, that in many cases no murmurs were heard, and I derive considerable comfort from this circumstance. The case is, however, an interesting and instructive one as showing how completely disease of the lung may overshadow the more serious disease of the heart.

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A WEEKLY REVIEW OF MEDICINE.

EDITED BY

FRANK P. FOSTER, M.D.

THE PHYSICIAN who would keep abreast with the advances in medical science must read a *live* weekly medical journal, in which scientific facts are presented in a clear manner; one for which the articles are written by men of learning, and by those who are good and accurate observers; a journal that is stripped of every feature irrelevant to medical science, and gives evidence of being carefully and conscientiously edited; one that bears upon every page the stamp of desire to elevate the standard of the profession of medicine. Such a journal fulfills its mission—that of educator—to the highest degree, for not only does it inform its readers of all that is new in theory and practice, but, by means of its correct editing, instructs them in the very important yet much-neglected art of expressing their thoughts and ideas in a clear and correct manner. Too much stress can not be laid upon this feature, so utterly ignored by the “average” medical periodical.

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