

dertaken with the idea that it is a simple procedure, for it is an extremely difficult undertaking to get from out its position, between the astragalus and the internal cuneiform, a bone of the shape of the scaphoid and having its great depth in a side-to-side diameter. The strong intertarsal ligaments which hold it in place are very difficult to sever, particularly on the far side, and there are no instruments devised especially for the purpose of getting at these fibrous bands. It is almost impossible to remove the bone intact. When it has been removed it is at once found that the great obstacle to inversion of the foot has been removed, and, by forceful manual manipulation, aided by the Thomas wrench, the foot can be brought to a much-improved position. Like the peroneal spasm cases, the foot should be put up in as extreme a position of inversion as it is possible to attain and held there in plaster but for a much longer time than is required in the peroneal cases. I think it is better to keep these patients at least six weeks in this position, then, by adjusting a moderately low flatfoot plate and gradually elevating this as the height of the arch can be improved the function of the foot will be found to be steadily bettered. This should be followed up by massage, exercises and local hydrotherapy to favor the improvement in tone of the muscles and make the patient, as soon as possible, independent of artificial supports.

Since following these precautions in the selection of patients suitable for operation among a large number of flatfeet coming to this clinic, the results of operative interference upon this kind of deformity have very materially improved over what they were before we recognized the existence of the types mentioned. Formerly, a very large number of our manipulative flatfoot cases relapsed. Now, a very small proportion show this tendency. We have practised peroneal resection in thirty instances and resection of the scaphoid in twelve. Sufficient time (two and three years respectively) has elapsed in the older cases to justify the conclusion that both operations in the proper instances are extremely satisfactory; in fact, are the only thoroughly satisfactory methods of treatment for these particularly intractable varieties of trouble with the foot.

I think the description of these deformities and the operative procedures employed, to which I have referred, have been sufficiently described in the above attempt at differentiation of types. An extended report of the individual cases upon which this short paper has been based would simply serve to encumber the text and they are, therefore, at this time omitted.

Medical Progress.

RECENT PROGRESS IN THORACIC DISEASES.

BY JOHN W. BARTOL, M.D., BOSTON.

ACTINOMYCES IN PULMONARY DISEASE.

THE clinical importance of the actinomyces or streptothrix group in pulmonary disease is emphasized in two recent papers, one by Warthin and

Olney¹ the other by Stokes.² Both papers are largely given over to questions of classification of different species of the organism and to pathological considerations, but both by illustrative cases, personal and from the literature, call renewed attention to the fact that there are many species of this group which produce suppuration or necrotic pseudo-tubercles in man and various animals, thus indicating the great importance, in differential diagnosis of tuberculosis, of searching carefully for members of this group in suspicious cases where tubercle bacilli are not found.

THE CHEST IN PULMONARY TUBERCULOSIS.

Brown and Pope³ agree that the view still generally held that the phthisical chest is flat needs modification, but as a result of their study of measurements taken in normal and tubercular individuals they are not willing to accept the conclusions of Woods and Hutchinson, reported in 1897 to 1903. They hold that even yet there is much to be done in the study of measurements and the estimation of the influences exerted by race, age, occupation, and altitude; but that as a general proposition, it may be granted that tuberculosis is more likely to be found associated with a chest which is sub-normal in its diameter and normal or super-normal in its length, although it cannot be claimed that such coincidence is a proven *propter hoc*. As a check on Hutchinson's figures, they fix the chest index (relations of anterior to transverse diameter) in health at 73, in the early stages of tuberculosis at 72, and in advanced stages at 76, indicating that his normal index is too low, and his tuberculosis index too high. It is probable that the progress of the disease tends to raise the index through changes in bulk of the lungs, but the index by itself does not appear to have any prognostic value.

PLEURISY AS A SIGN OF PERITONEAL INFECTION.

The danger of faulty diagnosis in cases where abdominal affections show symptoms pointing to the thorax or vice versa is well recognized; not so generally remembered, however, is the help which positive evidence of exudate in the pleural cavity may give in establishing the hidden existence of abdominal inflammation. Auerbach,⁴ after giving a brief account of studies, statistical and anatomical, published in recent years, including the important work of Küttner showing the free communication by lymph channels between pleura and peritoneum in both directions and the complete isolation of the two halves of the diaphragm, reports five cases seen by himself within a short time of each other in which the existence of a pleurisy either serous or purulent was obviously indicative of a purulent condition (in most instances liver abscess) below the diaphragm.

MORTALITY OF PNEUMONIA IN HIGH ALTITUDES.

A contribution to the moot question as to whether pneumonia is a more dangerous disease

¹ Am. Journ. Med. Sci., October, 1904.

² Am. Journ. Med. Sci., November, 1904.

³ Am. Journ. Med. Sci., October, 1904.

⁴ Münch. Med. Wehr., March 7, 1905.

in high altitudes than in low, is made by Kieffer,⁵ who reports the statistics from Fort Russell, Wyoming, situated 6,195 feet above sea level. These figures cover the entire history of the fort, for a period of thirty-eight years, and comprise 127 cases of pneumonia, with 20 deaths, a mortality of 15.74%. Discounting the fact that these cases occurred in healthy, vigorous men, in good hygienic surroundings and also that the figures are too small for positive deductions, the impression is still gained that the prevailing belief in an increased mortality in high altitudes is not justified by facts, as is already indicated by the studies of Hoagland and of Swan, and that here, as elsewhere, the determining factor is chiefly the virulence of the infection.

TRAUMA AS CAUSE OF AORTIC INSUFFICIENCY.

Sinnhuber⁶ adds to present list of such cases three more, in which autopsy was lacking, but which, none the less, seem without much question further instances of the traumatic origin of serious valvular disability.

PERICARDITIS.

It is encouraging to conclude from the present frequency with which papers on inflammatory lesions of the pericardium appear that the profession is being rapidly awakened to the fact that in the past such affections have been more often overlooked than recognized. Recent contributions by Scott and Leconte, and Riesman,⁷ while adding nothing new, are interesting in the presentation of cases and serve a useful end in keeping up the agitation.

OPEN DUCTUS BOTALLI.

All signs continue to fail in the diagnosis of congenital heart defects, and the difficulty of establishing any reliable table for distinguishing one form from another becomes more and more apparent. Arnheim⁸ reports a case in which on basis of absent cyanosis, marked enlargement of the heart especially to right, a bonnet-shaped extension of the dulness to the left of the sternal border, a loud roaring systolic murmur often continuing into diastole, most intense in second and third space and transmitted to vessels of neck, second pulmonic inaudible, and a left radial pulse much stronger than right, he made diagnosis of open ductus Botalli with dilated pulmonary artery. At autopsy was found pulmonary stenosis, tricuspid insufficiency and aneurysmal dilatation of pulmonary artery, but ductus Botalli was closed and there was no septum defect whatever. The inexpediency of trusting to the dogmatic statements of the various investigators of congenital defects is brilliantly illustrated by the contradiction which this case offers to any one scheme of diagnosis.

DILATATION OF THE HEART.

The promptitude with which the heart muscle can dilate under stress of extraordinary demand and return again to normal limits is illustrated

by Starck, who reports⁹ the case of a student of athletic tastes and an active bicycle rider. While taking the prescribed course of duels at the University he found it necessary on two occasions to quit on account of distress in heart region. On the evening before the final fight his heart was normal, but during the duel next morning he was forced to stop in the second round with a pulse rate of 160 and severe cardiac pains. On examination within a short time the heart's dulness extended to left anterior axillary line, not increased to right, the rhythm was unequal and irregular, the tones were clear — by evening the outlines were nearly normal. Inasmuch as he had previously gone through physical exertions much greater than the duels without serious results, Starck emphasizes the importance of the nervous influences arising from the agitation caused by the great importance on collegiate standing which the duels have. He thinks that the psychical factor often has an important influence in causing acute dilatation.

Moritz¹⁰ discourses on the difficulties in diagnosis and interpretation of heart dilatation — A differential between the purely physiological form (which may occur) and the lesser grades with pathological basis is very hard to establish, and a mere determination of the slight enlargements even with orthodiagraph is sometimes impossible. It may be postulated, however, that every considerable increase in heart volume, and every increase that does not return to normal or returns only gradually is to be considered pathological. It has been firmly established that pathological dilatation may result from a variety of causes, *i. e.*, valvular disease, infectious or toxic influences, and physical strain; but there are other important points to establish in regard to questions still unsettled; *e. g.*, the effect of exercise, alcohol, hot baths, narcotic and other medications; the orthodiagraph, which has already served to demonstrate interesting changes in heart volume during the Valsalva manoeuvre, and in change of posture, offers the best method of studying these problems.

The relation of diphtheria to cardiac dilatation is discussed by Dietten¹¹ and a case of unusual dilatation of left auricle resulting from mitral stenosis is reported with comments by Muller.¹²

HEART RHYTHM.

In spite of the many observations and studies that have been made both in the laboratory and in clinical cases, the present knowledge of disturbed heart rhythm remains largely theoretical and based on experimental data which, to say the least, seems fairly open to the varying interpretations given by different observers. Papers on the subject are frequent, and must be kept track of by the interested student of such matters, but in order to fairly appraise the results original sources must be consulted. Contributions by Lommel, by Gerhardt, by Finkelnburg¹³ treat

⁵ Am. Med., March 4, 1905.

⁶ Deut. Med. Wehr., No. 32, 1904.

⁷ Am. Journ. Med. Sci., September, 1904.

⁸ Berl. Klin. Wehr., Feb. 20, 1905.

⁹ Münch. Med. Wehr., Feb. 14, 1905.

¹⁰ Münch. Med. Wehr., April 11, 1905.

¹¹ Münch. Med. Wehr., April 11, 1905.

¹² Zeit. f. Klin. Med., B. 56, H. 5 and 6.

¹³ Deut. Archiv. Klin. Med., B. 82, H. 5 and 6.

respectively of Occasional Doubling of Heart's Rate, Extra-Systole and Heart-block, while Fauconnet¹⁴ writes of Bigeminal Pulse after Digitalis.

TESTING THE HEART'S FUNCTION.

Methods both simple and complicated now abound for testing the capacity of the heart. Amongst the former should be classed the manœuvre of Herz,¹⁵ who directs the patient to flex the arm at the elbow very slowly for a given length of time, the pulse being counted before and after the exercise, and according to the effect on the rate certain conclusions are drawn which seem to have rather a limited application.

Kraus, on the other hand¹⁶ contributes quite an elaborate paper which does not lend itself to summary, in which he reports the effect upon the heart's action, studied in many ways, of irritation of the sympathetic.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION. SURGICAL SECTION.

PORTLAND, OREGON, JULY 11, 12 AND 13, 1905.
TUESDAY AFTERNOON.

THE chairman, DR. MAURICE H. RICHARDSON of Boston, delivered his address, which dealt very largely with the errors and mistakes occurring to surgeons under any and all circumstances and he strongly urged the advisability of young men spending considerable time studying under some good surgeons before branching out for themselves.

THE CURE OF INGUINAL HERNIA.

DR. HENRY O. MARCY of Boston, dealt with this subject under twelve headings: (1) History; (2) Anatomy; (3) Pathology; (4) Cause; (5) Cure; (6) Limitations of Operation; (7) Reconstruction of Inguinal Canal to its Normal Obliquity; (8) Methods of Suturing; (9) Suture Material; (10) Closure and Sealing of Wounds without Drainage; (11) Subsequent Care; (12) Results.

FIBROID GROWTHS OF THE ABDOMINAL WALL.

DR. CHARLES A. POWERS of Denver, referred to the frequency of the so-called dermoid tumors, and stated that they generally occur in women from twenty-five to thirty-five years of age, who have recently been pregnant, most often in the region of the right rectus muscle, below the navel. He detailed their etiology, form, size, pathology, development and course, together with their symptoms, diagnosis, management and the immediate and remote results of operation. Postoperative hernia and relapse of growth were referred to as well as a detailed description of the author's cases and a review of the literature.

DR. ROBERT F. WEIR of New York, mentioned having seen two similar cases on whom he operated, one of whom was well the last he heard of her, while the other died in the hospital after having twice recurred and being twice removed.

DR. RIXFORD of San Francisco, reported a case in a young woman of twenty-seven who had remained

well for ten years since the operation, during which time she had been twice pregnant.

DR. McCLENON of Baltimore, reported a case in a man sixty years of age who had been twice operated upon for the removal of the growth, the last time only a couple of months ago.

DR. CONNELL of Fon du Lac, reported two cases on each of whom he operated with good results and without recurrence.

DR. WILLOUGHBY of Los Angeles, reported a case which was inoperable, but which improved very markedly on the use of the Coley serum.

DR. FULTON of Astoria, reported a case on which he operated sixteen years ago, and in which there has been no recurrence.

DR. L. L. McARTHUR of Chicago, reported a case successfully operated upon by him which very well illustrated the difficulties of diagnosis in these cases.

The Chairman, Dr. Richardson, referring to Dr. Willoughby's remarks concerning the Coley serum, stated that he also had seen patients materially benefited by this serum.

DR. POWERS, in closing, called attention to the diagnostic difficulties in these tumors and stated that he heartily agreed with the ideas of Prof. Jacobi of New York, who said that "When clinical facts collide with previously existing scientific knowledge the knowledge goes to the wall and the facts stand."

SPLANCHNOPTOSIS FROM A SURGICAL STANDPOINT.

DR. JAMES E. MOORE of Minneapolis, detailed a number of cases occurring in his experience and gave his methods as well as the results of treatment.

DR. COFFEY, Oregon, showed some illustrations of work done by himself in similar conditions, and expressed doubt as to the amount of weight the peritoneum and ligaments were capable of supporting.

DR. A. ERNEST GALLANT of New York, did not believe operation was necessary in many of these cases and argued in favor of posture. He blamed the construction of the clothing of the average trouble, which he said no surgery would overcome. A special corset should be worn to relieve the tension at the waist and should be so adjusted as to produce a bulging of the stomach at the epigastrium.

DR. B. B. DAVIS of Omaha, commented on the helplessness he always feels when women come to him with their relaxed muscle and pearshaped abdomens. He reported having operated upon some with varying results, one case however being particularly successful.

DR. MOORE, in closing, stated that there was no case on record of the liver having been torn from its moorings by injury, which shows the tremendous power of the ligaments of that organ.

THE EARLY DIAGNOSIS OF GASTRIC ULCER.

DR. H. D. NILES of Salt Lake City, claimed that the symptoms on which we relied in the past to aid us in making a diagnosis were only of value in a small proportion of cases, anatomic, physiologic and pathologic evidence pointing to the frequency and importance of this condition. The operating-room revelations he said confirmed this evidence. As to diagnosis, he considered that no one symptom was sufficient to arrive at a conclusion. He compared the relative frequency of different symptoms and believed that dyspepsia, gastralgia and gastric catarrh were often made responsible for symptoms unquestionably due to gastric ulcer. In his opinion, the relative frequency of gastric ulcer should lead us to suspect its possible existence in all chronic stomach cases resisting conservative treatment, and he grouped the symptoms

¹⁴ Münch. Med. Wehr., Dec. 20, 1904.

¹⁵ Deut. Med. Wehr., Feb. 9, 1905.

¹⁶ Deut. Med. Wehr., Jan. 5, 1905, *et seq.*