RECENT ADVANCES IN MEDICAL SCIENCE.

MEDICINE.

UNDER THE CHARGE OF

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TREATMENT OF CARDIAC IRREGULARITY.

RYSER (Correspondenz-Blatt für schweizer Aerzte, Nos. 24, 25, and 26, June 1916) contributes a clinical study of the phenomena attending irregular activity of the heart in the various forms of this condition. His most interesting deductions are in the matters of prognosis and treatment. With regard to the occasional and isolated extrasystoles which are shown by numerous hearts, sometimes with the consciousness of the subject, sometimes without it, he considers these are of a completely harmless nature. For instance, he considers that these occasional extrasystoles in an organically and otherwise functionally sound heart are no disqualification whatever for military service. As regards treatment of this condition he sets in the first place of importance strychnine, which has also the recommendation of Wenkebach. The dose he gives is 2 mgrs. daily over 20 days. Its effect is usually shown quickly, and lasts for a prolonged period. In those cases which do not respond to strychnine he recommends small doses of digitalis, which diminish the excitability of the heart muscle. He recommends 0.05 to 0.1 grm. of digitalis leaf. Physostigmin he also recommends in minute subcutaneous doses, and in occasional cases quinine may be tried, with advantage. Heart-block is of course a much more serious condition, particularly when it is due to an organic cause, which then probably affects wide areas of the heart as well as the conducting bundle; digitalis has in these cases a positively hurtful action, but atropin, which increases the conductive power, may be beneficial. Auricular flutter accompanied by perpetual arrhythmia is, on the contrary, a condition in which digitalis must be pushed to an extreme, even to the extent of bringing on sickness and great slowing of the heart.

REPORT ON THE ENTERIC CASES AT HELIOPOLIS.

Summons (Med. Journ. of Australia, 6th May 1916) gives a review of the enteric cases treated in the first Australian General Hospital.
at Heliopolis. Few soldiers will have sustained any permanent damage from this infection, and out of 800 cases treated in that hospital there were only 5 deaths. But although the paratyphoid fever was of little harmfulness to the individual it was a great burden to the army and to the medical units. The European and Egyptian predominating organism appeared to be *bacillus paratyphosus* B, while in the Gallipoli infection the predominating organism was *bacillus paratyphosus* A. It is suggested that as *bacillus paratyphosus* A is the common organism in India it may have been brought to Gallipoli by the Indian troops. The writer considers that the value of prophylactic inoculation has been fully upheld, and that the troops having now been inoculated against paratyphoid infections, and carriers having been discovered and isolated there will probably be far fewer cases in future.

**Perforating Carcinoma of Esophagus.**

In about 50 per cent. of cases of carcinoma in this region there is perforation into the mediastinum, pleura, bronchi or blood-vessels causing death, but Guttmann and Held (*Med. Record*, 10th June 1916) record a case in which the symptoms of a broncho-esophageal fistula due to a carcinoma persisted for four months before a fatal result supervened. There was no vomiting, foetor, dysphagia, or similar symptoms up to within a short period before death, but there were cough, spit, etc., which were afterwards found to be due to a bronchiectasis which clinically had simulated tuberculosis. Coughing and choking supervened whenever the patient attempted to drink, and the dribbling of food down through the fistula into the bronchi could be quite well seen by the fluoroscope during life.

**Myopathy and Internal Secretions.**

M'Couch and Ludlum give a review of what is known as to the relations subsisting between myopathy and other muscular disturbances on the one hand, and disorders of the internal secretions on the other hand (*ibid.*). They find that myotonia congenita and myasthenia gravis are frequently associated with muscular dystrophy, and that myotonia congenita has occurred in connection with muscular dystrophy and may be identical with one form of it. There is some evidence suggesting that thyroparathyroid deficiency may bear a causal relationship to myotonia, while myasthenia is frequently associated with hyperthyroidism, hypoadrenalism, and probably with hyperactivity of the thymus. Myopathy has been found in association with many disorders of internal secretion, perhaps most frequently with hypopituitarism. The writers report a case which presented the fully developed characters of both dystrophia adiposo-genitalis and the facio-
Surgery

195

scapulo-humeral type of progressive muscular dystrophy. Whether the glandular disorders bear a causal relationship to myopathy or are secondary to it, or whether both are due to a common cause, is uncertain, but the writers conclude that the combination is too frequent to be a mere coincidence.

CONTROL OF THE PNEUMOTHORAX TREATMENT OF PULMONARY TUBERCULOSIS.

This treatment has fallen into desuetude largely because of the difficulty of controlling and observing the effect of air introduced into the pleural cavity. Hirsch (ibid.) describes how the injection of air should not only be controlled at the time, but should also be carefully and persistently followed up either by repeated radiography or by frequent examination of the lung by means of the fluorescent screen. As regards the subsequent study for the determination of the amount of collapse, restitution, etc., the X-ray examination gives the following data: The degree of pneumothorax and its distribution, the condition of the lung as to collapse, mobility, etc.; the condition of the pleural cavity as to the presence of effusion; the displacement, if any, of the heart and other mediastinal contents; the position and movement of the diaphragm; the occurrence of subcutaneous emphysema; the extent to which absorption has taken place, a moderate amount of gas, say 600 c.c., being all absorbed in two weeks; and finally the progress of the disease.

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Surgery

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RESECTION OF JOINTS IN WAR SURGERY.

Delageneriére (Journ. de Méd., 10th April 1916) describes his experience in a large number of cases of joint injuries and infections which were treated by excision.

In the case of war injuries resection of joints is most often indicated in order to suppress the local infections of the joint, which in many cases may be responsible also for a general septicemia. In other cases the object may be simply to remove or repair crushed articular surfaces, or in the later stages to correct malposition.

As a general rule, ankylosis is desirable in the case of the knee-, ankle-, and the shoulder- joint; a movable joint is aimed at in the finger-, wrist-, elbow-, and hip-joints, and sometimes in the shoulder.