PREVENTION.

Alcohol cannot be adequately dealt with, for total prohibition would never be tolerated by the British public, especially the working classes.

Much severer measures could and ought to be taken (nothing short of imprisonment will stop them) with druggists and herbalists who treat venereal disease. The recent Act making it illegal to treat venereal disease certainly had a steadying effect, but it is wearing off to some extent. In 1917 a soldier told me of one druggist with a business near a large camp who treated *hundreds* of cases of gonorrhoea a day. He paraded a microscope, down which he looked, and then sold his capsules at a preposterous price. All this should be stopped. Compulsory notification would only lead to concealment with spread of quackery and would be a failure.

Army statistics show that prophylactic treatment has decreased venereal disease in the army. Especially is this true of the American army, because if a man contracts venereal disease, beyond losing his pay during disablement, he is not punished if he has used the treatment provided after exposure. If he gets venereal disease and has not used preventive treatment according to regulations he is court-martialled and punished if convicted. This might do good in the British army. On the other hand, prophylactic treatment is by no means infallible and gives a false sense of security. Many men, and youths especially, are kept from indulging in promiscuous intercourse by one thing only—namely, the fear of catching venereal disease. Remove this fear and immorality will increase.

CONCLUSIONS.

The conclusions reached from the facts set out in this article are:

1. The excellent result of intramuscular novarsenobillon clinically; there is, therefore, scope for the discovery of a combination which will render it painless.
2. The best means for preventing the spread of venereal disease at the present time lies in early diagnosis and early treatment, and, as regards the army, periodical "short arm" inspections of troops, as at present carried out. This, of course, cannot be applied to the civil population.
3. Quackery—advertised "remedies" and counter prescribing—should be more rigorously dealt with in order to prevent serious delay in commencing proper treatment.

All the "Wassermann" tests for these cases were done by Major Dean, R.A.M.C.(T.F.), at the Manchester University Laboratory—a sufficient guarantee of their accuracy.

I beg to thank Lieut.-Colonel Wilson, Officer Commanding 2nd Western General Hospital, for kindly giving permission for the publication of this paper; to his energy and zeal, working under great disadvantages, is due in a great measure the success attained at New Bridge Street Military Hospital:

SOME EXPERIENCES OF DISORDERED ACTION OF THE HEART WITH THE MESOPOTAMIAN FORCE.

BY

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THE following experiences of the various types of cases which have passed under my own care, previously diagnosed as disordered action of the heart (D.A.H.), may not be without interest to many who have had charge of similar cases. The diagnosis—for so it is used—of "disordered action of the heart" includes anything from auricular fibrillation to isolated extrasystoles, and is no more final than such a term as "disease of the arteries," which includes anything from aneurysm or atheroma to malformations.

A clinical analysis of the observed cases of disordered action leads immediately to their division into (a) those with symptoms, (b) those without symptoms.

D.A.H. with Symptoms.

In the first group come the large number of cases with tachycardia. The rhythm is nearly always regular, and

the condition frequently follows an acute illness, or there is a rheumatic history, but there may be no obvious association with any acute infection. The symptoms are mainly shortness of breath and palpitation or pain, and are the result of an approach to the exhaustion of the reserve force of the heart in response to effort. Men on field service suffering from this disability are able to do light camp duties, but are unfit for full military duties. A severe case, with a regular pulse rate of over 120 on frequent examinations, remained continuously on light camp duties for a period of six months, with the exception of three days. When, however, he was subsequently put on sentry duty he had to be readmitted to hospital and invalided, as the reserve force of his heart had been temporarily overtaxed. Drugs are of little avail, and, if the case is unaccompanied by other physical signs, rest in bed is unnecessary, and may even be harmful. Milder cases may be given three parades daily, not exceeding half an hour each, and when on examination once a week the pulse rate is under 100 after lying down for five minutes they may be advanced to a higher category involving parades of three-quarters of an hour each. An examination each week will decide on those fit for duty.

Though cases suspected of malingering are so rare as to be negligible, yet the symptoms present may be exaggerated by one man, whereas the next will lay very little stress on them. When, as on service, the soldier thinks his disposal depends much on his replies, it would be more than human nature to expect him to detail them without bias. These are the difficulties which many others must have experienced, but by fair treatment and careful examination, which are appreciated, a fairly accurate judgement may be made. By such methods many cases of tachycardia will be returned to their units without being invalided, and afterwards carry out full duties, even with a pulse rate above the normal.

The treatment of these cases lies in the removal of any infection, and later graduated work, keeping the symptoms from response to effort within the bounds of those experienced by a healthy man during heavy exertion, for then the reserve force will not be exceeded.

A rarer type of tachycardia giving rise to symptoms has a continuously irregular rhythm and is due to auricular fibrillation. The condition may be transient and determined by an acute infection. A case of bacillary dysentery came under my care with slight fever. On the third day of treatment in hospital the heart changed from a regular to a continuously irregular rhythm at 120. A few hours later it was still irregular and had risen to 160, as counted by the stethoscope, though the temperature had fallen to normal. He was given tincture of digitalis *mxv* every six hours, and after forty-eight hours his pulse dropped to 70 and became regular. After prolonged convalescence from the dysentery, he returned to his former duties and was still carrying them out twelve months later. The auricular fibrillation was due to old myocardial disease (as a child he had chorea for six months), but was determined probably by the absorption of toxins from the intestinal infection. The association of regular tachycardia with amoebic dysentery is not uncommon, and by some clinicians the emetine is stopped, as it is held that the emetine gives rise to the tachycardia. In my own cases the emetine was never withheld for this reason, and I have never regretted carrying out the full course—that is, 1 grain hypodermically daily for twelve days (repeated if necessary)—as the increased pulse rate is believed to be due to the absorption of toxins and drops as a result of the elimination of the infection and not as a result of the cessation of the administration of emetine. Emetine, moreover, is frequently administered without any effect on the pulse rate. Another man with auricular fibrillation, but without tachycardia, is known to have carried out his duties for eighteen months after he first came under my notice, and without any treatment, but the pulse rate, as shown by polygraphic records, always remained between 70 and 80. It is mentioned as being a rare type of auricular fibrillation, for almost all cases have a rapid rhythm unless controlled by digitalis. From his history it appeared that he had had this condition for over twenty years and yet was still leading a moderately active life.

Paroxysmal tachycardia, auricular flutter, and even heart-block, except in influenza, are rare in soldiers.

D.A.H. without Symptoms.

Patients diagnosed D.A.H. unaccompanied by symptoms are quite frequent, but may nearly always be discharged to full duty after a short period of training. The most common is the "youthful type of arrhythmia." In many cases these patients are admitted to hospital with a febrile illness, and during convalescence the heart is found to be irregular and the diagnosis is then changed to D.A.H. "by new disease supervening." The cases which exhibit this physiological irregularity most markedly have slower pulse rates than the normal 72. They are rapidly advanced to full duties and remain free from symptoms. The importance of an accurate diagnosis in these cases cannot be over-emphasized. With a diagnosis of D.A.H. they are regarded as "heart" cases, and I have received them after being evacuated through several hospitals and all the time as stretcher cases.

In addition to these cases, there is a further group which is diagnosed D.A.H., and is comprised of patients with extrasystoles. One of these patients gave a history of having been in a stationary hospital for a mild attack of dysentery. After treatment he was discharged to duty, where he was examined by his medical officer, who found an irregular rhythm, diagnosed D.A.H., and sent him back into hospital. He was evacuated down river some five hundred miles as a stretcher case. On examination, his pulse rate was 82, with frequent irregularities occurring in an otherwise regular rhythm. A polygraphic record showed these irregularities to be due to extrasystoles. When questioned as to symptoms, he maintained somewhat indignantly that he felt quite fit. He was allowed to get up at once, and on the second day after getting up, though he had been a bed patient for three weeks, he was sent for a five mile walk, and came back fresh and none the worse. In a few days he returned to his regiment and remained on duty for at least eight months.

Patients with extrasystoles are usually free from symptoms, and, when there are no other physical signs, may be allowed to lead a normal life. Occasionally the patient seeks advice when he discovers this irregularity by accident. He may be reassured and carry on without any break in his work.

Textbook descriptions of beri-beri frequently speak of the irregular pulse. Graphic records were taken at different periods of the earlier stages of this disease in twenty-five cases, and in no case was any arrhythmia found apart from the "youthful type." This was disappointing, as the investigation was undertaken at a time when the shade temperature varied on the different days between 110° and 122°, and assistance was required to divert the streams of perspiration trickling down the face.

Conclusion.

While these experiences relate only to military cases attention is drawn to the fact that the only respect in which they differ from cases seen in civil practice is in the proportion falling under each group. There is an increase in the tachycardias with regular rhythm, whereas the severer forms of disordered action indicating serious disease are comparatively rare, and there is no group peculiar to the soldier's heart as a separate clinical entity.

PERITHELIOMA SIMULATING PANCREATIC CYST.

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THE following interesting condition is recorded to add one further type of pseudo-cyst of the pancreas, so closely simulating a true cyst of that organ that it was only at the necropsy and by tissue section that the true pathological condition was determined.

For a month before admission to hospital the patient, a man aged 29, complained of discomfort after food, with recurring bilious attacks. He noticed a tumour in the upper part of the abdomen in the middle line, which increased in size, gradually at first but more rapidly in the last fortnight. He lost weight steadily and his general condition began to fall off.

He came to hospital on August 6th, 1918, as a walking case; shortly after admission he vomited about two pints of stomach

contents, suggesting gastric stasis, rather than intestinal obstruction. The vomiting persisted in spite of lavage and rest.

A large, rounded, semi-solid mass, easily movable laterally, but less so in the vertical direction, filled the whole of the epigastric and part of each hypochondriac region.

There was dullness over the mass, tympanicity above and below, and slight dullness in the flanks. No definite thrill was elicited. The liver dullness was normal. The stool after an enema did not suggest chronic parenchymatous pancreatitis. Cammidge's test was not carried out.

The diagnosis was made of a pancreatic cyst between the stomach and colon, causing stomach stasis, and probably intestinal stasis, by kinking one or other viscus. As the patient's condition was fair, operative measures were immediately resorted to.

Operation.

A paramedian incision was made on the right side over the mass, through the thinned abdominal wall. The mass was packed off and a little free fluid cleared from the abdomen.

A large semi-cystic tumour was exposed with the layers of the gastro-colic omentum stretched over it. The stomach was pushed high up with the pylorus kinked, and the colon was thrust down by the neoplasm.

The layers of the gastro-colic omentum were divided, and the cyst proper brought into view. Free blood in the interior aroused the suspicion of retroperitoneal sarcoma, and this was made certain on opening the mass and evacuating the contents, which consisted of about two pints of semi-solid "brain-like" tissue freely mixed with organized blood clot. The lesser sac was not involved, the foramen of Winslow was patent, and the pancreas apparently normal. Ablation of the mass was impossible, and as shock was very marked, rapid marsupialization was completed and the sac drained and packed. The abdomen was closed in the usual manner.

The patient's general condition improved for forty-eight hours, during which time large quantities of sero-sanguineous fluid was discharged from the remains of the growth. This oozing continued, and the general condition gradually failed. During the last six hours vomiting of a toxæmic rather than an obstructive type was a marked feature. He died six days after operation.

Post-mortem examination of the abdominal organs only was permitted. The liver, spleen, and kidneys were normal. The suprarenals, carefully examined in section and by the naked eye, were normal, as were the stomach and intestines. The pancreas was normal macroscopically and microscopically. Metastasis was noted at one point in the mesentery.

The remains of the growth consisted of a small solid mass in the retroperitoneal connective tissue, but attached to no organ, lying across the spine and above the pancreas. The rest was a mere shell, having been depleted of its contents at operation.

The growth had no definite capsule, except some feeble granulation tissue. The mass and its contents showed numerous blood spaces lined by large malignant cells radially arranged and spreading in solid masses from the blood spaces. There was much degeneration at the points distant from the spaces. The malignant cells are large with deeply staining cytoplasm; nuclei large, pale, and showing an active mitosis.

The growth is a perithelioma or an encephaloid carcinoma with degeneration at the points remote from the blood spaces.

AVOIDANCE OF RELAPSE IN GONORRHOEA.

BY

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THERE have long been signs of medical dissatisfaction with the older methods of dealing with gonorrhoea. I believe the dominant weakness of nearly all existing methods of treatment is the long time required before the last gonococcus is overcome. In spite of careful and conscientious irrigations or injections relapses are common, and the disappointed patient often realizes that the discharge has returned within a few days (and usually less than fourteen days) after cessation of such treatment. At the present time the methods of irrigation or injection are the most widely used for obvious reasons. Taking irrigation first, its operation suggests the ability to wash out from a tube the morbid material it contains. No doubt some of the gonococci, and their enemies the pus cells, are removed at each irrigation in this way. But it is clear that it is only slightly effective. If it were possible for the incoming stream of the liquid used in lavage to enter the very numerous mucous crypts and recesses of the urethra, and if this liquid, having entered, were able to balloon these recesses and to wash out their contained gonococci, then the disease would obviously be overcome by one or two irrigations. If repeated often enough each day recovery must be ascribed to an overtaking of the gonococcal populations faster than they can multiply. It is difficult to recognize a germicidal effect in the process, or to see a compensation in the method for the dilution and loss of the invaluable