

months ago has still flattened papules on the flexor surfaces of the forearms. Nevertheless, I offer this suggestion with some reserve as I am not at the moment fully convinced that it is uniformly the case. It is certain that patients experience the same feeling of buoyancy and of wellbeing after galyl; appetite and nutrition improve, and there is frequently an increase in sexual vigour. Mr. Ernest Lane tells me that he believes relapses are rather more frequent than with salvarsan, and I have seen two cases of recurrent throat symptoms, both after a single injection of 0.4 grm. galyl, and both of which cleared up after a second dose.

Second only in importance to effectiveness in clearing-up symptoms is the question of toxicity. More than 150 deaths are credited to salvarsan, to say nothing of innumerable accidents and severe reactions, mostly in the early days and variously attributed to the water used, to improper preparation of patient, to pathological conditions, to too frequent administration, or to errors of technique. Nor has the use of certain other of the newer preparations been without disaster, as witness the cases so graphically described by Mr. Lane and Mr. J. E. R. McDonagh, of the honorary staff of this hospital. Some of these I have been privileged to examine, and I found them rather impressive. At a recent meeting of the Dermatological Section of the Royal Society of Medicine I exhibited a well-marked case of arsenical intoxication following one injection of 0.6 grm. novarsenobenzol, being one previously reported by Mr. Lane, showing ten months after injection profuse raindrop pigmentation, keratosis of the palms and soles, persistent fine branny desquamation, and cicatricial alopecia.

So far as I am aware no fatality has as yet been reported with galyl. Neither has there been reported any undoubted case of arsenical intoxication, but in this connexion it is to be remembered that the remedy is new and its literature at the time of writing very meagre. In a certain small number of cases of the present series there have been mild reactions shortly after or within a few hours after injection, but in only one, summarised above, did the temperature reach 104°, and in this case the presumption is strong that it was due to an endotoxic rest. If a patient has partaken of a hearty meal shortly before an intravenous injection is given vomiting is not uncommon with any drug, perhaps with chilliness or a rigor, pyrexia, or even purging and enuresis. If, however, he has been properly prepared, has rested well, and the alimentary tract has been cleaned overnight by a brisk purge and an enema if required, such symptoms are at least not usual.

An interesting complication which I have encountered twice was a reaction resembling serum sickness, large urticarial wheals which itched intensely appearing within a few hours of administration and remaining two or three days. One of these patients has had a second injection, preceded by adrenalin, no symptoms then appearing. A quite recent case developed a moderate erythema of the forearms within 24 hours, and has not been given a second dose; this redness disappeared in a day or two and there have been no further developments. The subject was anything but robust and had suffered from morbus coxae. I have notes of seven cases exhibiting a pseudo-Herxheimer reaction, all the symptoms seeming to be temporarily aggravated, the throat more congested and painful, and rash and malaise accentuated. It is, however, but fair to say that any one

of the reactions and symptoms just enumerated is at least as frequent with salvarsan and neosalvarsan, and none is typical of arsenical poisoning, very probably being due, as the studies of Yakimoff and others indicate, to the release of various bacterial endotoxins.

AN EPIDEMIC OF JAUNDICE OCCURRING AT ALEXANDRIA.

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DURING the months of June, July, and August, 1915, we had the opportunity of observing and treating a large number of cases of jaundice admitted to the medical wards of a general hospital. These cases presented several features of great interest, not the least being that they arose almost without exception from a single camp. The clinical picture was so constant and differed in so many respects from that of ordinary catarrhal jaundice that we regard the disease as a definite clinical entity.

On admission the patients complained of progressive weakness and loss of appetite of from seven to ten days' duration. Constipation was present in about half the number; the remainder had suffered from diarrhoea of varying severity for two or three days. In most cases the diarrhoea had ceased before the onset of jaundice, which had been present for three or four days and was frequently accompanied at the onset by pyrexia of mild degree; the majority were apyrexia throughout their stay in hospital. Nausea and vomiting were frequently complained of; vomiting in 4 cases persisted for several days after admission and in one of those was particularly severe. Headache was practically constant, and in several cases severe headache persisted throughout the patients' stay in hospital. The patients were of remarkably good physique, but there was considerable loss of flesh in most cases. The jaundice varied in intensity from a slight involvement of the conjunctivæ only to a profound generalised condition. In the mild cases the jaundice persisted for a few days only; in the severe it remained for several weeks and in some was still present when the patients passed from observation.

The tongue in all cases was moist and strikingly clean. The liver was invariably enlarged, sometimes extending as much as 3½ inches below the costal margin, the vertical dullness frequently measuring 9 inches in the nipple line; there was marked tenderness. The spleen was similarly greatly enlarged, frequently extending upwards to the seventh rib in the posterior axillary line, one or two inches below the costal margin, and sometimes reaching as far forwards as the nipple line, splenic and liver dullnesses not infrequently merged one into the other. The spleen was tender, and pain in this region was a common symptom.

The heart presented a very striking degree of enlargement in practically all cases. This enlargement was so definite and so persistent, associated as it was with giddiness and dyspnoea on exertion, as to make it almost the leading feature in the clinical picture. Cardiac dullness was almost constantly increased to the right, the right border of the heart frequently extending 2 inches, and in one case 2½ inches, to the right of the midsternal line. The cardiac impulse was frequently palpable to the right of the sternum. The apex beat remained internal to the left nipple line, the increase in the size of the heart apparently affecting the right side only. The heart sounds remained clear; in one case only an apical systolic murmur was present on admission. There was never any

evidence of tricuspid regurgitation. The pulse, which was of good strength, was slow during the persistence of jaundice, being frequently less than 50 beats per minute, returning later on, however, to a more normal rate. Sinus arrhythmia was constant and no abnormal arrhythmia was met with. The increase in the size of the heart, the liver, and the spleen was frequently confirmed by X ray examination. The lungs presented no abnormal signs; at no stage was there any sign of congestion.

The stools during the persistence of jaundice were pale and for the most part constipated. The urine was concentrated, acid, of high specific gravity, and contained bile pigment. There was no albumin. Casts were not present and leucin and tyrosin were absent. The blood was normal. There was no general lymphatic glandular enlargement, but several cases presented definite enlargement of isolated glands in the axillæ and groins for which no local cause could be assigned. Several of the patients were suffering from insect bites on admission; in the majority, however, the skin was intact. General nervous weakness and mental depression were present almost always, and were extreme in the patients who presented marked jaundice. The superficial and deep reflexes were present and active in the majority of the cases; the knee-jerks were absent in one; the abdominal reflexes were absent in one and enfeebled at one stage in another. In a fourth there was, on admission, a short quick extension of the great toe on either side on plantar stimulation, later on replaced by a normal response. There was no ankle or patellar clonus.

Most of the patients remained under observation for a period of from three to four weeks, when they were sent to England to complete their convalescence, as progress towards recovery was extremely slow, even in mild cases in which the jaundice quickly disappeared. In all patients marked general weakness persisted, and the majority were unable, after having been out of bed for two or three weeks, to perform even moderate exercise, such as walking upstairs, without inducing dyspnoea and giddiness, which were accompanied by marked increase in the pulse-rate; there was no præcordial pain. Some enlargement of the heart persisted in practically all cases, and was not reduced by rest. The enlargement of the liver and spleen persisted to a slight extent. Several patients, admitted after having been discharged from other hospitals to light duty and convalescent camps, still complained of great weakness and presented cardiac, hepatic, and splenic enlargement, although a period of two months had elapsed in some of these cases since the jaundice had subsided. There were no fatal cases. All were treated with absolute rest in bed for several days. Different groups of cases were severally treated with castor oil, saline purgatives, and "intestinal antiseptics," including beta-naphthol, bismuth salicylate, salol, and guaiacol carbonate. Drug treatment, however, had no apparent influence upon the course of the disease.

We wish to express our thanks to Colonel Austin, officer commanding the General Hospital, for his sympathetic interest in our clinical work, and to Lieutenant-Colonel Lister, in command of the Medical Division, for permission to publish the records of the cases. We are indebted to Lieutenant D. Thomson, R.A.M.C., for furnishing us with a report upon the condition of the blood.

CENTENARIANS.—Mrs. Catharine Morrison, of Greenock, whose death is announced, reached the 100th anniversary of her birthday six months ago. She was able until September last, according to the *Times*, to attend to the business of the little shop which she kept.—Mrs. Anne Allen has died at Bath at the age of 104.

PNEUMOSAN IN THE TREATMENT OF PULMONARY TUBERCULOSIS.

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IN THE LANCET of August 8th, 1914, I gave an account of the immediate effects following pneumosan treatment in 103 cases of pulmonary tuberculosis, and promised to report after an interval to what extent the initially favourable effects in these patients should be maintained. It must be stated at the outset that cases treated at the clinic are rigorously kept under observation, and their homes frequently visited by the nursing staff, even after discharge from active treatment. Thus, improved hygienic conditions, which in greater or less degree almost invariably reward our efforts, undoubtedly play no small part in influencing the results. It was impossible for me to eliminate this factor, for I am convinced that no method of treatment which does not include the setting in order and the constant keeping in order of the patient's home has more than a transitory influence upon the course of tuberculosis. Indeed, experience has shown me that it is in those families who respond most readily to the advice tendered by the visitors that improvement is most rapid and most permanent. On the other hand, there is the true old adage, "You never can cure a fool of consumption." With the exception of this most necessary basis, the group of patients under consideration have received no treatment other than pneumosan injections, on the lines indicated in my previous report. The initial evidences of improvement then noted were improvement in appetite, renewed feeling of general well-being, increase in weight, diminution of cough, and defervescence of temperature. At the date of my first report (when I had been using pneumosan for 18 months) the position was as follows:—

TABLE I.

| — | Stage (Turban). | | | Very advanced. | Total. |
|-------------------------|-----------------|-----|------|----------------|--------|
| | I. | II. | III. | | |
| Deteriorated... .. | 1 | 0 | 2 | 6 | 9 |
| No change | 5 | 2 | 5 | 3 | 15 |
| Improved | 10 | 10 | 8 | 5 | 33 |
| Much improved... .. | 13 | 8 | 9 | 5 | 35 |
| Disease arrested | 7 | 3 | 1 | 0 | 11 |
| Total | 36 | 23 | 25 | 19 | 103 |

The term "improved" indicates improvement chiefly of symptoms, physical signs being but little altered. "Much improved" indicates great improvement both of symptoms and physical signs. "Disease arrested" is applied only to cases free from all symptoms and showing no physical signs of activity.

In order to be on the safe side I never designate any case as cured. In spite of the above results, which appeared to me satisfactory, I saw no reason to credit pneumosan with specific properties, but regarded it merely as a tonic and alterative which, in conjunction with sustained improvement in his environment and mode of living, put the tuberculous individual in a position successfully to combat the invading bacilli. However this may be, the results of the treatment certainly have surpassed my expectations, the modifications which