cutting into the substance of the kidney; the cut kidney surfaces were brought together with catgut stitches, the edges of the opening in the posterior parietal peritoneum united, and the abdominal cavity closed without drainage.

Result.

There was some haematuria during the week following the operation, otherwise recovery was uneventful, and the patient a year after the operation is quite well.

Character of the Tumour.

The tumour proved to be a thin-walled cyst containing clear fluid. The pathological report states that the wall of the cyst consists of renal tissue, undergoing fibrosis in parts.

REMARKS.

The interest of this case lies first in the difficulty of diagnosis. The swelling appeared to be cystic and to have a point of attachment in the left lumbar region. The diagnosis made before operation was that of a mesenteric cyst, and even when the abdomen was opened this was the impression given; it was only when the left kidney came into view that the true nature of the case became clear. A renal condition had not been considered, as there was no swelling or resistance in the left loin and the latter area was resonant; also the extreme mobility of the tumour and its obvious intraperitoneal nature seemed opposed to a condition connected with the kidney.

Renal tumours either have the colon in front of them or push it towards the middle line; it is rare to find them becoming pedunculated and to all intents and purposes intraperitoneal structures to the inner side of the colon, as in this case. Large single renal cysts may be of a serous nature springing from the cortex of the kidney while the rest of the kidney is healthy, or they may be paranephric cysts originating in renal or adrenal rests. Both serous and paranephric cysts may be connected with the pelvis or one of the calices of the kidney by a narrow channel.

The symptoms which these large cysts give rise to are due to pressure on surrounding organs.

The second point of interest in this case is the chronic intestinal obstruction produced. This, I think, was brought about in two ways: in the first place, the splenic flexure of the colon was constricted where it passed round the neck of the cyst, and in the second place, the heavy cyst itself was pressing upon the descending colon.

SUBCUTANEOUS INJECTIONS OF EMETINE IN PULMONARY TUBERCULOSIS.

By JAMES A. RAEBURN, M.D. EDIN., D.P.H.,
MEDICAL OFFICER TO THE BATTERSEA DISPENSARY FOR
THE PREVENTION OF CONSUMPTION.

In April, 1913, my attention was drawn to a communication in *La Presse Médicale*, of Paris, from Drs. Flandin and Joltrain, in which they reported that they had commenced to use hypodermic injections of emetine for the treatment of haemorrhage in tuberculosis of the lungs, and that the results had been far and away more satisfactory than those obtained by them from any other method. Having at that time several cases of haemorrhage, both severe and slight, under my care at the Battersea Tuberculosis Dispensary, I communicated with Dr. Flandin, asking him for particulars of his method of using the drug. He was good enough to send me by return notes on the cases he had till then treated with emetine, and also a letter giving his conclusions on the action of the drug. He said:

Emetine acts on the haemorrhage, but in an irregular manner on the fever. When it has to do with haemorrhage of the congestive period of tuberculosis the stoppage of the bleeding is absolute; when it has to do with the haemorrhage in a tuberculous patient at the period of softening or of cavity formation, the bleeding stops under the influence of emetine, but for several days the patient expectorates black spots, as if expelling the blood secreted in the bronchial tubes. The effect of the emetine does not seem to be of very long duration.

It is good after the arrest of the haemorrhage to continue for several days a daily injection. I have seen in one case the haemorrhage stopped by the emetine recommence after the cessation of the injections, and stopped again immediately after a single injection.

The experience of Dr. Flandin decided me to try the effects of the drug, and suitable cases soon presented themselves. At first I strictly confined myself to cases of

haemorrhage on the lines that Dr. Flandin had indicated, and with regard to its use in such cases I can endorse all that he claims for it.

Some of the cases on whom I used it had only slight and occasional haemorrhage but copious expectoration, and it was observed that not only did all traces of blood disappear from the sputum, but that the sputum itself decreased or ceased. This observation induced me to employ the drug in some cases of copious expectoration alone, and the results have been sufficiently striking to justify my mentioning them to the profession, in the hope that others will be induced to further investigate the properties of emetine in relation to its effects on congestive and inflammatory conditions of the lungs.

I have now used it on over forty cases, and have endeavoured to note its effect both on haemorrhage and on expectoration. As above stated, I endorse Dr. Flandin's remarks on its effect on haemorrhage, but as he is about to publish the results of his experience with it, I will not enlarge on that aspect of its use.

As I am not aware of anything having been published with regard to its effect on expectoration and cough, I need make no apology for giving my experiences. In analysing these, I find that the cases divide themselves into three groups:

I. Bronchitis in which no tuberculosis can be demonstrated.

II. Cases which are tuberculous, but which do not reveal tubercle bacilli in the sputum.

III. Cases which do reveal tubercle in the sputum.

Group I.—Many patients referred to the dispensary to have a diagnosis made on them are found to belong to this group. It has been pointed out to me that the title of this communication relates to the use of emetine in pulmonary tuberculosis, and that this first group are not tuberculous cases at all. It has to be remembered, however, that all inflammatory conditions of the lungs and air passages prepare the soil for the growth of the tubercle bacillus and that such persons are the very ones who are liable to become tuberculous. Anything, therefore, which assists in keeping his tissues in a healthy condition preserves the resisting power of the individual and is a factor in preventing this disease.

Provided the heart's action is not impaired, cases in Group I nearly always improve rapidly on emetine. The expectoration disappears, and on auscultation the moist sounds cease to be heard. This improvement is not transitory, but remains after the injections of emetine are discontinued. It has often been very striking how subjective and objective improvement have accompanied each other, the patients voluntarily stating that they have felt better since the emetine was begun. It has, however, to be emphasized that the heart's action must not be weak. If it be weak the bronchitis does not improve. Unfortunately many cases of bronchitis, both complicated and uncomplicated with tuberculous disease, have such a weakness of the heart, and this must be remedied before emetine is of any use.

Once only, when I pushed the dose a little beyond the usual amount, the patient complained of slight nausea. This passed off immediately on the drug being withheld, and I have observed no other undesirable effect which could be attributed to its use.

The following case may be cited to illustrate the group:

A. B., female, aged 9. For several months had had a cough with expectoration, which latterly had become copious. In such a young child's sputum tubercle bacilli are seldom found, but we examine it in all cases that have expectoration. In this case the sputum was examined three times carefully, with a negative result each time. Von Pirquet's test was applied twice and was negative both times. There was no dullness to be made out in the lung and no noticeable prolongation of expiration, but moist crepitations were heard all over. During three weeks injections of emetine were given twice weekly, and after the last injection the breath sounds were clear and the cough gone. No other treatment was given.

This is a recent case, and I still have her under observation.

Group II.—Several cases with physical signs and histories pointing to tuberculous disease, and giving good reactions to subcutaneous injections of tuberculin, but in whose sputum no tubercle bacilli could be found, have been treated with emetine, and with no other drug. These

have all improved, and some have become clinically well. I have not yet determined whether the reaction to subcutaneous injections of tuberculin is altered, as I wish a few more months to elapse before doing this test.

In all these cases it has to be remembered that the home conditions were supervised and faults corrected wherever possible, and I quite admit that these hygienic measures in themselves are sometimes sufficient to induce a cure. After allowing for all that, I am convinced that improvement has been more rapid and more universal in the cases that got emetine. The expectoration dries up and the cough disappears.

Dr. Flandin's remark that the drug acts on the congestive stage of the disease is quite at one with my own observation. I assume that in the second group it acts on the bronchitis, whether this precedes the tuberculous disease or is secondary to it, but I do not consider that it acts on the tuberculous disease itself.

Some of these cases, after preliminary treatment with emetine, have responded particularly well to tuberculin.

A good case to illustrate this second group is the following:

Mrs. C., aged 29, had been treated at another dispensary for over a year, but she admitted that she had been very irregular in attendance, and came here on moving into Battersea. She had severe cough and expectoration. Both apices were dull and full of moist crepitations, and she was steadily losing weight. No tubercle bacilli could be found in her sputum. Her temperature was normal and steady; $\frac{1}{2}$ mg. of Koch's old tuberculin was injected, and in six hours her temperature rose to 100.8° . On the reaction subsiding therapeutic doses of tuberculin were given, but neither her symptoms nor her physical signs improved.

Emetine was given twice weekly for four weeks, by which time the moist sounds and the expectoration had disappeared and the cough troubled her only in the morning. Tuberculin was then recommenced. That is four months ago. The lung condition has steadily improved since, and no dullness can now be made out. Her weight has gone up 8 lb. She is clinically well, and feels in a fitter condition than she has done for years.

Group III.—Cases with tubercle bacilli in the sputum. With this group I am not able to give generalizations, as the results are not nearly so regular. In some cases I have ceased using it as, so far as one could judge, it was producing no effect.

In some cases improvement followed its use, but immediately its administration was discontinued the symptoms returned, and as this is a new use the drug is being put to I hesitate to continue it indefinitely.

As above stated, the slight feeling of nausea has been the only undesired effect that could be attributed to emetine. It remains to be seen whether such nausea is a disadvantage, but until we have more experience I prefer not to persist with it in such cases.

When the heart's action is weak one has learnt not to expect the lungs to clear up. In these cases the congestion is secondary to the weakened circulation, and is quite compatible with the theory that the drug acts on congestion when it is primary in the lungs or secondary to tuberculous disease there. One case with mitral incompetence, but with compensation well established, did very well.

In conclusion, while I do not consider that the drug has any effect on the tubercle bacillus, I believe it is a valuable addition to our weapons for reducing congestive conditions in the lungs, and that, therefore, it is both a preventive and curative agent in tuberculosis.

The drug has hitherto been prepared for use in dysentery, in which disease it is given in very much larger doses than Dr. Flandin used; and my experience corroborates his—that small doses are best for these lung cases. He gave 0.04 cg. of the salt. I used Whiffen and Sons' ampoules, which contain $\frac{1}{2}$ gram of emetine in 15 minims of distilled water. By diluting this in four parts of water, 1 minim equals 0.04 cg., and I have come to consider 4 minims of this dilution a suitable dose to give when the object is to control expectoration or lessen congestion.

THERE is a serious shortage in the number of medical officers of the French army. The reasons given are that the work is very heavy, and involves much clerical labour, that the pay is too small, and that the position in relation to combatant officers is unsatisfactory. Moreover, the recent deprivation of titles carrying a military significance has caused the service to become unpopular.

AN ECONOMICAL TREATMENT OF INEBRIATES.

By A. M. ROSEBRUGH, M.D. TORONTO,

MEDICAL OFFICER OF THE ONTARIO SOCIETY FOR THE REFORMATION OF INEBRIATES.

THE probation officer of the society visits the police cells in the morning before the opening of the court and offers a helping hand to any of the prisoners charged with drunkenness who seem really desirous of reformation. He also visits the juvenile court and takes charge of drunken non-supporters of their families who may be committed to his care. After discharge by the court the case is dealt with according to circumstances. He may be brought to my office for office treatment, or he may be taken to the cottage hospital of the society for treatment there.

The inebriate signs a pledge agreeing to take treatment for at least three weeks. In most cases, however, the treatment extends beyond that period. We endeavour to keep in touch with our cases indefinitely, more especially in periodical cases.

The families of our patients are visited, employment found, temporary help given where and when necessary. Reconciliation between man and wife in many cases is effected, and an effort made to place the family upon a higher plane of life and living.

Medical Treatment.

For practical purposes I divide inebriates into the following classes—namely, first, cases in which there is a constant crave for "drink"; secondly, cases in which this crave is periodic; and, thirdly, cases in which there is no crave. In the latter class the inebriate drinks to be social or to drown sorrow. For this class the Christian missionary, or the clergyman, or the farm colony is indicated rather than medical treatment.

In the case of the periodical drinker, the character of the periodicity requires to be studied, and the return of the drink period anticipated and provided for.

It is, however, the inebriates with the constant crave for drink that contribute most largely to swell the great army of drunkards. The medical treatment extends over a period of at least three weeks.

Hospital Treatment.

The treatment, whether in hospital or elsewhere, is commenced with calomel at bedtime and "salts" or "seidlitz" the following morning.

Acute gastritis in hospital cases is treated with $\frac{1}{2}$ -grain doses of calomel given every half-hour for five hours, followed six or eight hours later with salts or "seidlitz." In case of acute alcoholism the treatment commences with a hypodermic injection of apomorphine $\frac{1}{4}$ grain, and, if this is not followed in ten or fifteen minutes by emesis, a second injection is administered, but with a dose of $\frac{1}{20}$ grain only.

In cases of nervousness, 30-grain doses of potassium bromide, well diluted in water, are given every three hours.

A hypodermic injection of strychnine $\frac{3}{16}$ grain is administered every six hours. One ounce of a solution of capsicum, 6 grains to the ounce, is given every two hours. The bromide solution is suspended when no longer necessary for relieving nervousness.

The hypodermic solution of strychnine is suspended at the end of six days, and on the seventh day the following mixture is substituted: Tincture of capsicum, 1 drachm; a solution of the fluid extract of quassia and the tincture of ignatia, $1\frac{1}{2}$ drachms of each to 8 oz. of water. Dose, a tablespoonful every hour while awake. The tincture of nux vomica may be substituted for the ignatia—the same quantity ($1\frac{1}{2}$ drachms to the 8-oz. mixture). This mixture is continued until the end of the full time of three weeks' treatment. The capsicum may be omitted, however, at the end of two weeks. Whisky and water may be given to patients for two or three days at the outset of treatment when there is a crave for it.

Office Treatment.

If the patient has a good home, and can be trusted to carry out the treatment faithfully, and has lost the crave