a bicycle pump the transverse colon, which owing to prolonged disuse had greatly diminished in size, became distended and was easily recognised. Having now found my two points for junction I divided the small intestine, invaginating the end entering A, cut across the commencement of the transverse colon, invaginated the cæcal end, and stitched the small intestine and transverse colon end to end. The operation was a severe one and occupied about an hour, the boy at this time being very collapsed and I had grave doubts as to his recovery. I was also in doubt, even if he did rally, whether the large intestine after lying fallow for three and a half years would again resume its functions, and it was a source of pleasure to me and a surprise and relief to my patient when 24 hours after the operation the bowels acted naturally. His subsequent recovery was slow but uneventful; he gradually gained in health and strength and now attends school daily. Though his present condition, compared with what it was, is satisfactory, it is by no means all that could be desired, for, as represented in Fig. 2, there is still a piece of prolapsed and useless small intestine leading to the original seat of his trouble. About 12 months ago I made an unsuccessful attempt to get rid of this remaining prolapse by invaginating the gut at the point B and closing the abdominal wall over it. The failure was due to a collection of offensive muco-purulent fluid in the portion of gut thus occluded which necessitated my re-opening it. There is now a slight but constant discharge of clear non-offensive fluid from the point B, but I am not disposed to make any further attempt at getting rid of the prolapse by means of invaginating the gut, and, on the other hand, I very much doubt whether complete excision of the portion of intestine leading from B to the original source of trouble would be possible.

Apart from any surgical interest the case may present I think it points to the value of the large intestine in general metabolism, for as the result of my interference the portion of the child's gastro-intestinal tract in active use has not been very appreciably increased in length, but one-half of the large bowel has been induced to resume its physiological functions greatly to the comfort and well-being of the patient.

FIG. 1.

Condition of patient on admission.

PS.—The above notes were written more than 12 months ago. In June last the boy was re-admitted on account of great abdominal distension; he was very ill and suffering much pain. The abdominal distension had existed for about two months. When I saw him there was no intestinal obstruction and his general condition was such that I did not consider any further operation likely to benefit him. He died a week later and at a subsequent examination we found

that the portion of intestine I had occluded—namely, 18 inches of the ileum, the cæcum and ascending colon—was enormously distended, filling the greater part of the abdomen. It was entirely shut off from the rest of the gastro-intestinal tract and filled with offensive muco-purulent fluid. The point of anastomosis between the ileum and

FIG. 2.

Condition after operation.

the transverse colon was difficult to determine. The vermiform appendix was represented by a short and thickened stump and "appendicitis" was no doubt the original source of the boy's troubles. The case demonstrates the danger there is in retaining in the abdomen any portion of gut occluded at each end.

Liverpool.

A CASE OF SAPRÆMIA DUE TO PYORRHŒA ALVEOLARIS SIMULATING TYPHOID FEVER.

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THE patient, aged 29 years, had been a nurse in the Royal Free Hospital for nearly three years and except for an attack of German measles in 1901 had enjoyed good health. She had never had typhoid fever and had had no trouble with her teeth except that two or three had been extracted for caries. For a week or two before the commencement of her illness she had noticed that her gums bled easily when using the tooth-brush. She was kept in bed from Dec. 20th, 1902, having been complaining for four or five days previously of general malaise, slight shivering, and aching of the limbs. The temperature from the first was remittent or inter-mittent in type, rising every day to 103° or 104° F., and falling again to normal, except that for the first three or four days after Dec. 20th it only dropped to 100° or 101°; the pulse-rate was from 90 to 110; and the

respiration-rate was from 20 to 24 per minute. The tongue was furred and there were complete anorexia, slight headache, a good deal of pain at the back of the neck, and marked mental depression. After the first few days there was some diarrhoea, two or three loose motions being passed daily. On Jan. 1st the blood was examined and the Widal reaction was found to be positive (with a dilution of 1 in 30 complete clumping occurred at the end of half an hour). At this time the disease was regarded as in all probability typhoid fever, especially as the symptoms and the course of the temperature were exceedingly similar to those which had been present at a corresponding period of the illness of another nurse who had died from undoubted enteric fever only a week or two previously. There were, however, no distension of the abdomen, no evidence of enlargement of the spleen, no bronchitis, and no appearance of spots. The symptoms now continued with very little alteration for several weeks, except that the diarrhoea gradually subsided. The temperature rose every evening with great regularity, for the first four days to 104° , then for about a fortnight to 103° , and afterwards to 101° or 102° ; it was always normal, or very nearly normal, in the morning, except—as already mentioned—for the first few days. There was never any rigor or shivering. This persistently intermittent type of fever, together with the absence of many of the ordinary symptoms of typhoid fever, gradually rendered the diagnosis less and less probable, but although repeated careful examinations were made no other cause for the fever could be found until at last attention was directed to the condition of the mouth. After the patient had been in bed a week or two she began to complain of dryness and soreness of the lips, gums, and front of the mouth. At first these symptoms were attributed merely to the fever and to the general condition, but as some pyorrhoea alveolaris was found to be present various antiseptic lotions were employed and shortly afterwards the evening rise of temperature began to be distinctly less marked. It was only, however, the long and regular persistence of the fever and the utter inability to find any other cause for it that at last led to the suspicion that the condition of the gums might actually account for the illness. Mr. Roughton was therefore asked to see the patient and as he found that pus exuded on pressure from the sockets of both the upper and lower incisor and canine teeth, particularly around the upper lateral incisors, he advised the extraction of these two teeth. This was done on Jan. 27th and there was a relatively considerable escape of pus afterwards from the sockets; in addition a thorough antiseptic treatment was applied to the gums generally, chiefly by a 1 in 80 solution of carbolic acid. The effect was immediate. The highest temperature on Jan. 27th was 101.4° , next day it only reached 99.8° , and never subsequently rose to 99° . Convalescence was rapid and no special precautions were taken in regard to diet, solid food being given freely as soon as the patient wished for it. She has remained quite well ever since and the pyorrhoea alveolaris has been practically cured by the application of listerine and of a solution of hydrogen peroxide to the gums and teeth and by filling the pockets between the gums and teeth with powdered sulphate of copper. Three more teeth had, however, to be extracted owing to their becoming very loose. On Feb. 10th the blood was again examined and the Widal reaction was found to be negative (with a dilution of 1 in 30 most of the bacilli remained active at the end of half an hour, although a few clumps were seen).

In some lectures¹ delivered at the Medical Graduates' College and Polyclinic one of us drew attention to morbid conditions of the mouth as a source of systemic infection. Although not susceptible of logical proof there seems to be little doubt but that the case now recorded is an example of the effects of toxic absorption from suppurating gums. The indefinite nature of the febrile condition, coupled with its rapid disappearance as soon as the gums were adequately treated, seems to point very distinctly to the true nature of the case. The close resemblance of the symptoms in this case to those of typhoid fever is most interesting and suggests to the physician the advisability of carefully examining the condition of the mouth in all obscure febrile conditions and the importance of remembering that the mouth is not only an index of the condition of the

alimentary canal, but may be really the *fons et origo mali*. Previous cases have been recorded of a positive Widal reaction in septicæmic and sapræmic conditions.

NOTE ON THE TREATMENT OF CHOREA BY ASPIRIN.

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I HAVE recently endeavoured to ascertain whether the course of chorea minor can be influenced by treatment with aspirin. I have given the drug in 35 consecutive cases of chorea, in all of which the subjects were out-patients at the Ancoats Hospital and the Manchester Royal Infirmary. They were kept away from school but were not confined to bed. The favourable results obtained cannot therefore be attributed to the influence of rest in bed.

It is not without considerable hesitation that I have ventured to write this note on the treatment of chorea, since the disease is one which has usually a tendency to terminate in recovery in course of time, apart from any medical treatment. In the mild forms of the disease recovery may occur in from six to ten weeks, whilst in other cases the choreic movements may persist for many months, or even a year, or longer. Mild cases will recover without drug treatment. In severe cases we cannot immediately arrest the disease by aspirin or by any drug or form of treatment. When steady and progressive improvement follows medical treatment usually one or two weeks, often a longer time, must elapse before recovery is complete. Bearing these facts in mind the necessity for great caution in drawing conclusions as to the action of drugs will be evident. Notwithstanding these difficulties I believe that aspirin has a distinct beneficial effect in severe forms of chorea.

In the mildest forms of chorea good results often follow treatment by various drugs and may occur even when no drugs are given. In these very mild forms I have seen decided improvement in cases which I have treated simply with five minims of peppermint water three times a day or with very minute doses of quinine (one-quarter of a grain). Hence, though my mild cases have done well on aspirin, I cannot say that the result was due to the drug and that they would not have done well without it, but in the severe and persistent cases I believe that aspirin is of distinct service in diminishing the duration of the affection. Though the drug does not immediately check the choreic movements its administration is usually followed by distinct improvement in six or seven days after a dose of 10 or 15 grains four times a day has been reached. This improvement steadily continues until complete recovery occurs.

All of the 35 out-patients improved when treated with aspirin; the improvement was progressive and complete recovery occurred. When the patient was able to take aspirin well it was never necessary to resort to other drugs because improvement did not occur under the administration of aspirin. Further, I had no necessity to send any of the patients to bed for rest treatment. Though these general statements are in favour of the drug they will not convince readers of THE LANCET of its value and I am aware that I cannot put forward any *conclusive proofs* thereof. To furnish such conclusive proof of the curative action of aspirin it would be necessary to publish the results of treatment in two large series of cases of chorea, the cases in one series being treated with aspirin with better results than those obtained in the second series without the aspirin treatment. All other conditions should, of course, be the same in the two series. It is scarcely necessary to add that such series of observations are for many reasons very difficult to obtain. What has impressed me, however, so much in favour of aspirin is the steady and marked improvement which has often followed its use in severe cases of long duration which have resisted other drugs and methods of treatment. In cases of long duration and in recurring attacks the patients' friends have, on several occasions, been much impressed with the value of the aspirin and on the recurrence of choreic movements at a later date have reminded me of the benefit derived from the drug in the previous attack. I am aware that such statements by the

¹ Roughton: On Some Morbid Conditions of the Mouth, THE LANCET, Sept. 27th (p. 847) and Oct. 18th (p. 1029) and 25th (p. 1108), 1902.