

actively treated, and in rheumatic endocarditis alkalis in large doses and iodides, with rest for long periods, are important preventatives.

(To be Continued.)

EARLY DIAGNOSIS IN CANCER OF THE TONGUE.

In a clinical lecture delivered at St. Bartholomew's Hospital, and reported in the *British Medical Journal*, Mr. Butlin again urges the extreme importance of early diagnosis in cases of cancer of the tongue. He directs special attention to certain conditions of the tongue which are to be regarded as "predisposing causes," and others which are definitely "pre-cancerous conditions," and asserts that there is no internal organ of the body in which the early diagnosis of cancer is so easy as in the tongue. Nor ought it to be overlooked, seeing the frequency with which doctors, and even patients themselves, look at the tongue. In regard to predisposing causes, Mr. Butlin mentions several local conditions. There is a condition of chronic superficial glossitis with red patches on the dorsum and borders of the tongue, and on further examination cracks, fissures, excoriations, and chronic ulcers will be found. In another variety the tongue looks at first to be covered with bluish fur, a sort of film, perfectly smooth. There are no appendages or papillæ on it at all. In another there is what looks as if a thick daub of white paint had been placed upon the middle of the tongue. In another there may be an association of chronic superficial glossitis with this white material, which is called leucoplakia. Now these conditions are not themselves cancerous, but they are predisposing to such an extent that Mr. Butlin believes that if one took 100 cases of cancer of the tongue, in about 90 of them the cancer would have been preceded by one or other, or a combination of these conditions.

Whether these conditions of chronic superficial glossitis and its results be due to past syphilis, or rheumatism or gout, or to much smoking or much drink is of small consequence, the great thing is that people who have them are much more liable to cancer of the tongue than other people are. Moreover, when these conditions have once become established the tongue can never again be made like it was before; so that these conditions when they have once occurred retain their potency as predisposing causes of cancer throughout the patient's life. In regard to the precancerous conditions—conditions which lead up from one of the states just described to the actual existence of cancer, Mr. Butlin says there are certain conditions which are so likely to pass into cancer that they may be regarded as absolutely pre-cancerous conditions. Warts and warty growths scattered about the tongue is the most common form in which cancer begins in these tongues.

Again, underneath the border of a tongue which is not in the least predisposed to cancer, a flat ulcer may form which may be ascribed to the rubbing of a tooth. But when the tooth is taken out the ulcer, instead of getting better, may slowly spread on the surface of the border of the tongue, its edges becoming a little raised and a little hard. This is a dangerous condition which is almost certain to become cancerous.

Again, in some of the white plaques before mentioned a small or larger area becomes thicker and

a little more prominent and then tends to break down and soften in the centre, and out of that condition cancer will almost certainly develop. As to lumps and nodules in the substance of the tongue, and the old chronic ulcerations of the tongue, they rarely become cancerous; they are not nearly so dangerous as the indolent ulcer which makes steady progress in the course of a few weeks or months. You will ask, says Mr. Butlin, why it is that medical men watch these dangerous conditions for weeks and months until the cancer is absolutely established? Why do they treat them with nitrate of silver, and washes, and lotions, and dose the patient with potassium iodide, when cancer is developing under their eyes? The predisposing conditions of cancer of the tongue are as well-known as anything in surgery, while cancer begins on these predisposed tongues in such a way that anybody and everybody can see it, yet it is allowed to drift until too late.

Mr. Butlin says that if consulted about warts and warty growths, particularly on tongues, which are the seat of one of the "predisposing conditions," one should see that no time is lost in removing them by clean elliptical incisions down into the muscle. The wound being brought together will heal in a few days. Then in regard to indolent ulcers ascribed to the rubbing of a tooth, let the cause of irritation be removed at once, and if at the end of a week or ten days from that time the ulcer is not well or healing rapidly it also should be cut out in precisely the same fashion. No time is to be wasted.

Again, if white patches become thicker and a little more prominent, particularly if they show a tendency to break down in the centre, or soften, they also should be cut out. Indeed, in bad cases of superficial glossitis, where the patient is always suffering and always in dread of the onset of cancer, it may be desirable to have that portion of the tongue removed even when there is as yet no sign either of cancer or of the pre-cancerous condition.

THE TREATMENT OF PUPERAL FEVER BY FORMALIN.

MUCH interest has lately been excited by the report of a case of puerperal fever in which recovery followed the subcutaneous injection of a considerable quantity of a weak solution of formalin. The case was a very severe one; there seems to have been no doubt about the infection of the blood with streptococci, and the recovery followed so smartly upon the injection of the second dose of the antiseptic that the physician in attendance, Dr. Charles C. Burrows, of the Bellevue Hospital, New York, felt that the cure must be attributed to the treatment. Since this case, which occurred in December, 1902, several others have been reported in which similar treatment has been undertaken with varying results, and it is hardly to be wondered at that at the present moment opinion is much divided on the subject. The optimists hold, and with a certain show of reason, that a case of this kind, taken in conjunction with the results claimed by Dr. Maguire in regard to the intravenous administration of germicide solutions in tuberculosis, opens up a large and hopeful field for the direct treatment of blood-infections, while the more cautious doubt. This is not the first time that they have heard of wonderful

cures of puerperal fever which have ended in nothing, and some go so far as to question whether the case may not after all have been one of sapremia rather than of true infection of the blood by streptococci, and it is on this point that the whole question seems to hinge. The patient was a negro woman who had been confined eight days before, and had when admitted a temperature of 104·3° Fahr., which by the next day had risen to 107°, and it is stated that the blood on being examined bacteriologically showed the presence of streptococci. On this an intravenous injection of 500 cubic centimetres of fomaline solution, of the strength of 1 in 5,000, was made into the arm, and the next day the temperature had fallen to 101° F. The next day the temperature began to rise again, and on the third day after the injection it reached 103° F. when a second injection of 750 cubic centimetres of a similar solution was given. After this the temperature fell and the woman has remained well. It is stated, however, that the uterus in this case had very recently been cleared out when the formalin treatment was commenced, and that any good effect arising from this local treatment might be expected to show itself about the time when the amelioration of symptoms did actually take place. In any case, as it seems to us, one cannot come to any conclusion on the strength of one or two cases—certainly not to a conclusion in favour of the treatment suggested. It is not in accordance with ordinary laboratory experience to expect a well defined and demonstrable septicæmia to be brought to a stand by the injection of any chemical antiseptic; the experiment has been tried again and again.

INTUSSUSCEPTION.

DURING the nine days which followed last Christmas Day Mr. Hugh W. Rigby,¹ who was the surgeon on duty at the London Hospital for that period, had the luck to have seven cases of intussusception admitted under his care. Six of these cases were submitted to operation and of these five recovered, which is distinctly encouraging and should, as he says, serve as a strong argument in favour of early resort to surgical intervention in these too often fatal forms of intestinal obstruction. One case was evidently quite beyond surgical treatment, and died soon after admission into the hospital. Of the six cases operated upon only one was irreducible and gangrenous, the others were reducible, some with ease and some with more or less difficulty. In no case was inflation or injection of fluid by the rectum attempted, the futility of thus wasting valuable time having been amply demonstrated, whilst the cases completely relieved by these methods are few and problematical. In each case an attempt was made to reduce the gut by simply introducing two fingers of one hand into the abdomen and manipulating the gut with the other hand upon the abdominal wall. Complete reduction by this method was, however, found to be impossible, and in every case the cæcum, colon and ileo-cæcal junction had to be brought up to the wound and manipulated outside the abdominal cavity. The difficulty of complete reduction by the first method was found to be due to the mobility of the cæcum, a distinct mesocæcum being present in nearly every case. Great care was taken to prevent prolapse of gut

or chilling of that which was necessarily exposed taking place. Mr. Rigby feels sure that the keynote of success in operating on these cases is rapidity. The time occupied from the actual incision of the abdominal wall to the tying of the last suture was noted and did not exceed 15 minutes in any case—one taking 12 minutes and another only 10. Feeding was commenced almost as soon as they had recovered from the anaesthetic effects. This in the absence of vomiting Mr. Rigby regards as an essential point, for in many cases children have been constantly sick for two or perhaps three days before admission, and are so exhausted that to withhold nourishment for a further six or eight hours after operation may turn the balance in the wrong direction. Opium (two minim doses of nepenthe) was given to each child if any restlessness was present.

¹ Lancet, Feb. 7.

THE PREPARATION OF DE-HÆMO-GLOBINISED BLOOD FILMS.

THE microscopic examination of blood has now been conclusively shown to be essential to the diagnosis of many serious affections, and of conspicuous service in affording indications for prognosis. It is therefore particularly desirable that means should be found whereby methods may be simplified and rendered as convenient as possible for speedy and accurate clinical work. Major Ross's recently introduced method of preparing de-hæmoglobinised blood films is certainly a step in the right direction.¹ It is not only of great assistance in facilitating the search for malarial organisms, but as Dr. Lovell Gulland has recently shown² is of much assistance in making a differential count in cases accompanied by leucocytosis. Professor Ross's method is as follows:—A large drop of blood, amounting to, say, 20 cubic millimetres is taken up on the glass slide or cover glass and is slightly spread out by means of the needle or lancet. It is then allowed to dry, either naturally or over a flame (without heating so much as to fix the hæmoglobin). The result is a thick and dried film in which about 20 cubic millimetres of blood (instead of the one cubic millimetre generally used) are disposed over an area which is not larger than that usually examined by the ordinary processes. As soon as the film is perfectly dry, by means of a glass rod add sufficient aqueous solution of eosin to cover the film. The solution is the one which is usually employed in order to obtain the Romanowsky effect. It is allowed to remain for about a quarter of an hour. This period should be inversely proportionate to the strength of the solution. As the film has not been fixed the solution of eosin will take out the hæmoglobin of the dried corpuscles, and, at the same time, will stain the residual mass consisting of the stomata of the corpuscles, the leucocytes, blood plates, and parasites. The stain is then washed off by a very gentle stream of water. As the film has not yet been fixed to the glass it is most essential that no strong current of water should be employed else the whole residual mass will be detached. As soon as the eosin solution has been washed out a weak solution of the methylene blue which is employed for the Romanowsky stain is allowed to run over the film. The blue is permitted