be necessary. It might be that the action was too superficial and that the parasites in the deeper layers were not affected.

(2) On the other hand, X-ray treatment alone has been employed in cases of oriental sore, and I myself have had encouraging results from it, but my experience is that it takes a long time and it sometimes fails.

It would then seem that both the "untreated" lead treatment and X-ray treatment are in themselves insufficient. In the method described is seen a combination of these two.

It is, however, not my intention to theorise. I am more concerned with the practical side of the question, which consists of the successful treatment of oriental sore. If my views possess an element of truth it would be gratifying, but the more important practical aspect of the subject is the one that I wish to bring forward.

TONSILLECTOMY: A SIMPLE METHOD USED IN 840 CASES.

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TONSILS that have been operated on, but not removed, are still seen in the surgical clinics of India. The old "amputation" method, as one saw it done at the rate of a score a day at Gray's Inn Field, London, fifteen years ago, appears to be the method still used by certain operators in India. In the West, however, the majority of surgeons have long since concluded that nothing short of complete enucleation of the tonsils can be considered good surgery, for that alone will give good, permanent results. Consequently, certain surgeons arm themselves with headmirrors, elaborate mouth-gags, tongue-depressors, enucleators, hæmostats, compressor-forceps, snares, swabs and ligatures, and use sufficient chloroform, ether, or local anæsthetic to provide for an operation lasting from 15 minutes to 2 hours.

Eight years ago it was my privilege to observe, in a Children's Hospital, New York, the simple method employed by Dr. E. Truesdale for the enucleation of the tonsils. So simple, rapid, and effective was his operation that within an hour and a half this surgeon had removed the tonsils and adenoids from 16 children.

The procedure was briefly as follows. The child was placed upon his back on a plain wooden table with a pillow under the shoulders. Chloroform was administered until primary anæsthesia was induced. Then, with the patient's mouth held open by a wooden peg between the back teeth of the left side, the surgeon, standing on the right side, with his right fore-finger, using the nail thereof to make the initial incision at the upper angle between the pillars of the fauces, gently and quickly dissected out the tonsils with the same finger, maintaining counter pressure externally with the left hand, until the tonsil lay limp in the throat attached by merely a small pedicle at the base. A tonsillitome (some might prefer a snare, threaded on a hæmostat or peritoneal forceps) was introduced; the forceps grasped the tonsil and the tonsillitome cut off the pedicle. The surgeon rinsed his hands in antiseptic, went around to the left side, while the anæsthetist moved the peg-gag to the right side, and removed similarly the left tonsil. A finger then explored the naso-pharynx. If adenoids were felt, they were at once removed by an adenoid curette. Less time was required for all this than is taken in the telling.

Since that time I have performed 840 tonsillectomies in India by this method, and not a case was encountered in which it could not be used with satisfaction. The main thing is to begin high enough to get well behind the tonsillar capsule and not into it. Our youngest patient was 2½ and the oldest 45 years of age. Chloroform has been used in all cases to the point where swallowing is just abolished,—usually one or two drachms suffice. By the time the surgeon has finished, the patient is beginning to regain consciousness, that is in two or three minutes. I prefer the usual adjustable operating table so that the head can be lowered, as soon as the surgeon finishes, to permit the blood to flow out. When clotting is observed to occur in the basin, the head and trunk are raised almost vertically, whereupon hæmorrhage usually stops completely. Should a little be lost by subsequent oozing, it is swallowed. This is often vomited later or may appear in the stools. The patient is put to bed with the head raised about a foot. He is kept in bed for several days. Weak lotions of boric, carbolic, peroxide, or Condy's fluid, are prescribed for frequent gargling. In spite of these, white patches or membranes will appear on about the fourth day in approximately 50 per cent. of cases. These patches are painted with Tincture Iodine, B. P., for a day or two, and respond promptly to such treatment. Diet is restricted to hot fluids for the first 24 hours; then semifluids; and finally solids whenever the patient requests them.

Of the 840 cases in my complete series, only three gave trouble after operation. In one (one of the first to be done), a youth of 18 years, oozing continued rather freely in spite of styptics, and recourse was had to ligatures and sutures 12 hours after the first operation. Uninterrupted recovery ensued.

In the second, a girl of 9 years, blood was lost freely, not from the tonsil wounds but from the nasopharynx, and the bleeding did not stop until a gauze pack was introduced.

As for the third,—Hospital Case No. 5152,—a widow of 41 years was admitted on 15th March, 1919, with a glandular sinus of the neck, left side, and a long history of frequent sore-throats and recurring coughs. She was gradually losing weight, and on admission weighed but

88½ lbs. The tonsils were found to be large and rough, with an ulcer on the left. Medical treatment was carried out for five days. On the 20th March, tonsillectomy was performed. The operation was well borne and hæmorrhage was slight. A little blood was vomited up that night and once on the following morning. After that nausea continued, but no more bleeding. Five days after operation the wounds were clean and healing nicely, but temperature had risen for the first time to 99°4; the next day to 102°.8, with some chest pain and dyspnœa. The following day cough began, and later foul sputum was brought up. Pneumonia with a small abscess had developed at the right base. Ten days after operation, menses set in, were very profuse for several days; patient grew weak and finally succumbed to her lung infection 15 days after operation.

It is only fair to add that one other patient, not in my series, was operated for me by this method, in our hospital, last December. The patient was a young man of 16 years and rather robust. Three days after removal of tonsils and adenoids, meningitis set in, to which he succumbed in a few days.

Conclusions.

The tonsils are germ-traps for the mouth and throat as is the appendix for the intestines. When, for some unknown reason, they lose their resistance to certain bacteria, these traps fail to maintain their rôle of protectors and then become menaces, to be removed if their host will consent.

The old operation of amputation of the protruding portion is inadequate and out-of-date. Such a procedure is no more rational than one removing merely the tip of a diseased appendix.

Complete enucleation can be performed, by the method herein described, rapidly and well, with but little anæsthetic and very slight risk.

AN OUTBREAK OF EPIDEMIC DROPSY AT MALDA JAIL.

By BASANTA KUMAR BHOWMIK AND SARASI LAL SARKAR,
Civil Surgeons.

In the October and November issues of the *Indian Medical Gazette* of the year 1915, one of us (S.L.S.) published an article on outbreaks of Epidemic Dropsy in the mofussil. In that article he mentioned the fact that he met with an outbreak at Nator during the year 1906, and gave details of that epidemic in the course of his paper, but he subsequently learnt from Sir Kailash Chandra Basu, Rai Bahadur, that the latter had noticed an outbreak of the disease as early as 1880 and had published an account of it in the *Indian Medical Gazette* for the year. From the analysis of the outbreaks in mofussil towns and villages one is led to the conclusion that the disease is probably due to some micro-organism present in infected food.

However, the etiology of epidemic dropsy has not been definitely ascertained yet; so it will be interesting in the cause of scientific study to collect the details of an epidemic in mofussil towns. With the above view I have collected the following information about the outbreak of the epidemic dropsy in the Malda Jail during this year.

My predecessor, Dr. Basanta Kumar Bhowmik, who was the Civil Surgeon of Malda from the 2nd December, 1919, had to go away on leave, being himself affected with epidemic dropsy, and left the following notes:

"The disease was first noticed in the Jail towards the latter part of December, when cases with swollen feet were noticed among the prisoners. On the 2nd January, about 20 prisoners who had swelling of their lower extremities were inspected by me. Most of these prisoners had enlarged spleens and had been admitted to Hospital several times previously for the treatment of malarial fever. As they were more or less anæmic the œdema was attributed to general ill-health. In a few other cases no such cause was ascertained. In all these cases the Sub-Assistant Surgeon was directed to examine the stools for hook-worm and the urine for albumin. But as he was very busy with the annual returns he could not carry out this examination in every case. In the meantime I myself fell ill and could not attend the Jail for four or five days.

On the 15th of January my wife developed œdema of the legs, and a few days after some healthy prisoners, 4 warders, as well as 4 other members of my family, became affected. The communicable nature of the disease became apparent and the cases were recognised as cases of epidemic dropsy. In the Jail the affected prisoners were segregated, labour was stopped, and they were given additional meat and dál rations.

In my house 13 persons altogether 'including the servants' are afflicted with the disease. Only two babies of one year old, and who live principally on milk, have escaped.

In the Jail there are altogether 40 cases, and since segregation the disease has not spread amongst the other prisoners.

On the 22nd of January I came to know that there were cases in the house of the District Agricultural Officer as well as in that of the steamer sub-agent. I came to learn on enquiry that the Agricultural Officer himself, his brother-in-law, his sister-in-law, and a servant were affected. They came from Pabna at the beginning of January, and the sister-in-law exhibited symptoms of the disease about the 7th or 8th of January. Other cases in that house followed. The first case in my house appeared on the 5th of January; so in these two houses the outbreak was nearly simultaneous. The steamer