

plugging of the vagina. These dressings are left in from 48 to 72 hours. Complications and sequela are to be treated as they arise. Another cardinal point to be observed is to undertake the operation a day or two after the completion of the menstrual epoch. Full doses of opium, both by the rectum and the mouth, must be used to relieve pain and produce sleep; whilst wine and good nourishment must be given to aid in effecting the repair of the wound that has been inflicted, and to protect the system against the supervention of the chief dangers, *viz.*, pyæmia, metritis, or pelvic cellulitis, or, it may be, peritonitis. By the observance of these precautions, many married women, who are inevitably barren, from the existence of a conical and elongated cervix, may be restored to a condition admitting of conception, and the bearing of children to the full term of utero-gestation.

REPORT ON CHOLERA IN THE HOSHUNGABAD DISTRICT DURING 1871-1872.

By Surgeon P. CULLEN, *Civil Surgeon, Hoshungabad.*

(Continued from page 176.)

At Hoshungabad precautions were early taken. A cholera hut was erected, with arrangements for segregating all cholera cases. The annual fair which takes place in February was prohibited, and, as far as was possible, the health of all arrivals was ascertained. The water-supply at this town is at all times mainly from the Nerbudda river; the wells being few, and of such depth as to make drawing water from them a matter of labor, but now it became necessary to conserve the stream properly; and this was done by a cordon of chuprassees along its bank for the whole length of the cantonment and native town. Certain of the upper ghâts were fixed on for taking the drinking water from, and all bathing, washing, or watering of cattle, was strictly prohibited above the drinking ghâts; and any one caught in any way defiling the stream, was punished by the magistrate. By these means a fairly pure water was secured, and several wells in the town that needed it were cleaned out and repaired, and a great deal of additional care and supervision was given to conservancy. These measures, though entailing some inconvenience on the inhabitants, were cordially adopted, and approved of by the more intelligent amongst them, and the satisfaction has been that not a single resident has suffered; and that although the disease was actually brought into the city from without, yet it did not spread.

With the exception of the cases brought by rail to Hurda, the district was free from the disease from the middle of February until the beginning of June. On the 4th of June, it was introduced to the village of Dipgaon, lying about 13 miles to the south of Hurda. On that date a traveller arrived at the village, whence was not properly ascertained, but most probably from Khundwah, where the disease was prevalent. He was suffering from cholera, and remained here eight days, and recovered. On the 6th of June, that is, two days after his arrival, a carpenter from the village of Serali, who daily worked close to where the sick traveller lay, was attacked; he went away to his own village, and died the following day. On the 9th of June a second man was attacked, and died within 24 hours. On the 10th, a fourth case occurred, who also died, and then the disease appears to have died out also.

But the carpenter had carried the disease to Serali, a village only two miles distant, where, however, it appears to have lain dormant, or to have been re-imported, as not a case occurred until the 24th June, when one Dhandiya, who had been out in the jungle all day, was attacked, and died the same night; then one Kurwar, who performed the funeral obsequies of Dhandiya, was attacked on the 26th, and died the same day. A third case, Malooka, who performed the funeral obsequies of Kurwar,

was attacked on the 26th, and died on the 27th; and then the fourth case, Budohoo, who did the last ceremonies for Malooka, was seized on the 27th, and died on the 28th; after which the disease subsided. Here no irregularity, or debauch, could be traced to these people, who seem to have taken the disease by contact with the person or dead body of their friends, and the disease did not spread to any other caste or family.

The village Amasail lies about four miles to the westward of Serali, and away from Dipgaon. On the 5th July, a Pujaree went to Dipgaon, and returned the same day; was seized with choleraic symptoms at 7 p.m., and died within 24 hours. Then a dhoby went to Dipgaon on the 7th July, and returned the same day; was seized at 10 p.m., and died at 7 o'clock the next morning; and after him a bunniah was attacked, and died, when no further cases occurred here.

Dolgaon lies about three miles north-west of Amasail, and in an opposite direction to Serali or Dipgaon. The disease appeared here on the 20th July, the first case occurring in a lad aged 18. On the 21st two cases occurred, and on the 22nd two more, making five in all; the whole of whom recovered. How the disease was introduced, could not be made out, as the persons attacked, and their families, denied having left the village; nor could any strangers be traced to it; but as all these villages lie close together, daily inter-communication must occur, and it was possibly brought by some one from one of the other three villages.

In reference to this outbreak, it may be noted that the disease steadily travelled westward, in the face of a westerly monsoon wind.

The village of Nukwara lies about six miles to the north-east of Dipgaon, and in the opposite direction to the villages just noticed. Cholera broke out here on the 29th July, and between that and the 17th August, 30 cases, with 18 deaths, occurred. Here, again, direct communication with a diseased locality could not be traced; but as this village is near the direct road from Khundwah, it was probably brought from there, or from one of the four villages already noticed.

The disease then took an extraordinary leap, and appeared on the 29th July in Hoshungabad, where a sepoy of the 32nd Regiment, Madras Native Infantry, was attacked and died; then his son was seized, but recovered. Two or three days afterwards, another child was attacked and died; and then the wife. Thus, in one house in the centre of the lines, there were four cases and three deaths; but the disease did not spread to any other hut or family.

This attack was attributed to eating some half putrid fish. No more cases occurred until the 26th August, when another sepoy was attacked and died, and again the disease disappeared.

There was then a lull until the 7th September, when a very virulent outbreak occurred at the village of Jhasulpore, lying about five miles east of Hoshungabad. Here the Kurmi women performed a *poqja*, which necessitated their proceeding about a quarter of a mile to bathe in a tank. The weather was very inclement at the time, and as nearly every woman and girl of the village went, there was a great crowd. That evening a girl, named Rumiya, was attacked at 6 o'clock; and the same night three cases occurred; and on the 8th, 13 more; and so on until there were 43 cases, with 25 deaths, up to the 26th September, when it subsided here entirely, but broke out at Raipore, a village about one mile to the northward. A strict quarantine had been maintained between these two villages; yet it would be difficult to state that inter-communication had not taken place. The disease stuck to Raipore until the 19th October, when it abated, there having been 35 cases, with 19 deaths.

There can be no doubt that constant communication took place between Hoshungabad and these two last-mentioned villages, during the prevalence of the disease, but not a single case occurred in this city.

On the 17th September, cholera appeared suddenly at Re-butgaon, 12 miles south-east of Hurda, where in four days there were 6 cases with one death; and on the 16th October it re-appeared at Hurda, in a man who had followed the Assistant Conservator of forests from the Betul district. He was, however, said to have been one week at Hurda in perfect health, and attributed his attack to bathing and drinking the river water. Between the 16th and 25th October, 8 cases with 3 deaths occurred, and then the disease stopped.

Whilst the disease was prevalent at Raipore, it also occurred at the village of Sahulwara, lying 40 miles east from Hoshungabad, on the banks of the Nerbudda, where it first appeared on the 26th September in a Rajpoot woman, who had not left the village for a long time; nor could any communication with a diseased locality be traced; nor any particular cause be discovered for the outbreak, beyond the general dirty insanitary state of the village. The disease completely disappeared by the 2nd October; there having been 18 cases with 12 deaths in eight days, and not any of the adjacent villages were affected. This was the only occurrence of the disease in the eastern portion of the district.

These notes are bare records of facts. I do not venture to say that the sanitary measures stopped cholera at Hurda, or prevented its spreading at Hoshungabad; but it is worth noticing that as soon as conservancy measures were actively adopted at Hurda the disease died out, and although five times afterwards re-introduced, it did not spread; and at Hoshungabad, though carried into the middle of the city, not a single case occurred amongst the residents.

At Bhaumugaon I have already mentioned that the coolies who drank the *nallah* water suffered severely; whilst of the villagers who drank well water not one was affected.

And a third point noteworthy is the fact, that the disease never crossed the Etarsi road, either by foot road or by rail. This road extends 11 miles, nearly due south from Hoshungabad to Etarsi; and I have shown how the disease was deposited at Etarsi by rail, and how when the Bhaumugaon coolies dispersed, and the principal number crossed this road eastward, yet not a single case was reported amongst them after they had crossed over. The country on either side of this road is of the same geological formation, with a good drainage from the south, towards the Nerbudda river. The occurrence of the disease nine months afterwards at Sabulwara, in the eastern portion of the district, cannot be taken as opposed to the above statement; nor yet the outbreaks at Jhasulpore and Raipore coming as they did eight and nine months after the Bhaumugaon epidemic, but up to the present time not a case has been reported in any of the villages lying on the east of this road between this and Etarsi.

A MIRROR OF HOSPITAL PRACTICE.

CALCUTTA NATIVE HOSPITAL.

CALCULUS IN THE BLADDER: ABSCESS OF KIDNEYS; DEATH.

REPORTED BY BABOO MOKODA CHURN SEN.

ATTARAM, aged 18, was admitted into the Native Hospital on the 3rd of June 1873, suffering from retention of urine. The patient was a weak, sickly-looking lad, and stated that he had had more or less pain and difficulty in making urine for some nine months past. About six days before admission into hospital he had been attacked with fever; there was no history of rigors or shivering, but continued fever had come on, causing great prostration of strength, and ultimately inability to pass his urine.

A catheter was introduced into the bladder without difficulty, and the presence of a large smooth calculus at once detected. The urine drawn off was carefully examined; it was alkaline, and contained large quantities of mucus and stinking pus. There was pain on pressure over the region of the bladder, but none

over the kidneys; nor were there any symptoms indicating disease of these latter organs. The temperature of the patient's body was 103°. His pulse was very weak, and his general appearance indicated great depression and pain. Quinine in ten grain doses to be repeated three times a day was ordered, and hydrate of chloral at bed time. He would only take a very small quantity of food. The temperature of the body was reduced when the boy came fully under the influence of the quinine, but still the thermometer stood at 102° in the axilla in the evening, and at 100° in the morning. This state of things continued (without rigors) from the 3rd to the 10th of June, when the temperature rapidly rose, the patient became covered with a cold, clammy sweat, and expired on the same evening.

On making a *post-mortem* examination, a large, smooth calculus, weighing 2½ ozs., was found in the bladder. The walls of the bladder were thickened; its mucous membrane ulcerated, and covered with muco-purulent matter. The ureters were dilated, and their inner surface in much the same condition as that of the bladder. Both kidneys were enlarged, their capsules being agglutinated to the surrounding tissues. The cortical portion of each kidney was found to be much wasted, and the pyramidal portion almost destroyed, its position being occupied by a collection of purulent matter, which also filled the pelvis of the kidneys; this matter was thick and offensive. In fact the pelvis of either kidney, and those portions of the organ formerly occupied by the pyramidal structures were converted into a large abscess. In other respects the various organs of the body were found to be healthy.

REMARKS BY C. MACNAMARA.—This case is a good illustration of the fact that in instances of stone in the bladder, extensive lesions of the kidneys may exist without our being able to detect the disease during the patient's life. The question arose with reference to the advisability of an operation in this case. Lithotomy seemed to me out of the question, on account of the high fever the patient was in, and the large size of the stone. It was considered doubtful, however, if the persistent fever was not kept up by the irritation of the stone in the bladder; and if so, lithotomy might relieve the symptoms. It was evident from the condition of the urine, and the amount of tenderness over the region of the bladder, that inflammation of that organ was present; nevertheless I came to a conclusion adverse to an operation, because I had in several previous cases found extensive disease of the kidneys present in instances of renal calculus, complicated with a continued high temperature of the body. We often meet with cases of stone in the bladder attended with intermittent fever. Under these circumstances the thermometer indicates the nature of the pyrexia, and quinine cures it. But if the patient is young, and suffering from a continued high temperature of the body, I do not think, as a general rule, it is advisable to operate for the removal of a stone from the bladder until the fever has subsided.

BELGAUM CIVIL AND STAFF HOSPITAL.

CASES OF SMALL-POX TREATED WITH SULPHURET OF CALCIUM SOLUTION.

By Surgeon C. T. PETERS, M.B., *Bombay Medical Service.*

HAVING seen a few cases recorded in the *Lancet*, I was asked, by Surgeon-Major C. J. Sylvester to try this lotion last August. The following are the results of this trial. I may say, that small-pox has never been known to rage epidemically in the town of Belgaum, but isolated cases are occurring at all seasons of the year. Patients on admission are kept under a tent, and are not allowed to leave it until all the scales have fallen off, when they are ordered to have a thorough washing with warm water and soap, clothes included, before they are finally discharged. Under the ordinary treatment by diaphoretics, &c., patients usually remain about six weeks in hospital. The following cases in which the external treatment has been added to the exhibition of aperients and diaphoretics, will show how, by destroying the eruptions at an early stage, the disease runs a milder course, and patients are able to leave the hospital earlier by two or three weeks:—

1. Arjun Wullud Luxman, a doolie bearer, admitted, 4th August 1872. Had fever for three days previous to his admission. Face is covered with confluent small-pox, but on the trunk and extremities the eruptions are of the discrete form. The small-pox eruptions were painted over with a freshly-prepared lotion of the calcium sulphide. On the next morning the eruptions appeared to be shrivelled up and of a dusky color. On the