Blood was examined on 26th May for malaria with negative results. Quinine was given as a diagnostic test—also negative. It appeared to lessen the amount of fever. The patient was unfortunately released on the 20th day of his illness, and elected to go home.

BULLET WOUND OF LARGE AND SMALL INTESTINE—COMMENCING PERITONITIS —OPERATION: RECOVERY.

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K.S.J., Hindu male, aged 50 years, silver-smith by occupation, was admitted into the General Hospital, Cuttack, on the morning of the 7th February 1902, suffering from a bullet-wound of the abdomen. The history given was that early that morning a dacoity took place in the town, and the patient having been aroused by the alarm, was standing behind a chowkidar when one of the dacoits to facilitate his escape fired several rounds from a revolver. One of the bullets after passing through the upper part of the left forearm of the chowkidar—shattering both bones—entered the abdomen of the patient. After receipt of the injury and prior to his admission to hospital he both passed water and had a motion of the bowel; neither are said to have contained blood.

On admission the patient had an anxious appearance, hurried thoracic breathing a full tender and tympanitic abdomen, whilst close to the outer margin of the right rectus muscle, 3″ below the costal margin was a perforating wound with very bruised edges, somewhat larger than a four-anna piece in size. There was no wound of exit.

Operation.—The wound was received at 2 A.M. on the morning of the 7th February, and the operation was begun immediately after my arrival at 12 noon of the same day, 10 hours after the receipt of the injury. After the usual surface cleaning under chloroform a vertical incision 3″ long with the wound as its centre was made in the abdominal wall. Whilst deepening the incision a small piece of splintered bone was found imbedded in the fibres of the rectus muscle.

On opening the peritoneum the transverse colon presented. This was withdrawn through the wound, and a brief search disclosed two irregularly rounded perforations with bruised edges. From the wound of exit particles of solid fæcal matter had been extruded. These wounds were cleaned and sewn up with Lembert catgut sutures. The edges being much bruised a double row of sutures were inserted. After thorough cleaning with sponges the colon was returned into the abdominal cavity. Subsequently the whole of the small intestine was rapidly turned out through the abdominal wound. The coils were distended with gas, were much injected in appearance, whilst numerous large yellow flakes of lymph were scattered amongst them.

At the lower end of the jejunum was a grazing wound about $\frac{2}{3}$″ long by $\frac{1}{3}$″ broad; over this area the peritoneum was stripped off, the muscular fibres torn and the mucous membrane exposed. This wound was also closed with Lembert sutures.

Owing to the distended state of the gut some difficulty was experienced in returning the intestines. A brief search revealed no trace of the bullet. The peritoneal cavity was thoroughly flushed out with hot saline solution until no more flakes of lymph were seen. The abdominal wound, after the bruised tissues had been snipped away, was closed with silk-worm gut sutures, except at its lower part, when a gauze drain leading to the wounded large intestine was inserted, and here the suture was not tightened. A dressing of sal-alembroth gauze and wool was applied. The subsequent history of the case was one of uninterrupted recovery. On the following day the gauze drain was removed and the suture tightened up. The wound was dressed again on the seventh day, and all the stitches were removed on the eleventh day. The bowels were moved naturally on the fourth day after operation. The temperature never rose above 100°. The patient was discharged cured on the 8th March 1902.

Remarks.—The revolver used was a ·450 bore British constabulary, loaded with Ely's solid brass central fire, ·450 cartridges carrying 13 gr. of powder and 225 grain leaden bullet. When subsequently operating on the chowkidar's forearm, which was ultimately saved, the upper third of the left radius and ulna were found to have been extensively comminuted, no less than twelve loose fragments of bones being removed at the operation, whilst several other fragments being attached by periosteum were left behind. The setting up which the leaden bullet must have undergone in passing through the radius and ulna accounted for the bruised condition of the abdominal and intestinal wounds which was their chief characteristic. The hospital is but poorly equipped, and it may be of interest to note that the saline solution was prepared by passing plain boiled well water through a boiled towel, and adding bazar salt filtered through a little blotting paper.

The patient was addicted to eating and smoking opium and was encouraged in the former practice during his convalescence. The stools were carefully searched, but the bullet was not passed, nor has any indication of its present position been afforded.

I desire to express my thanks to Assistant-Surgeons Satish Ch. Dey and Ananda L. Bose, the former for his assistance during the operation, and the latter for the great care he took in the after-treatment of the case, and for the preparation of these notes.

THE EMPLOYMENT OF SETONS IN THE DISTRICT OF BACKERGUNGE.

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A CUSTOM, which is probably slowly dying out, prevails in the district of Backergunge, and also, I understand, in other parts of Eastern Bengal. This is the practice of wearing a "seton" so as to maintain a permanently suppurating sinus, whereby the evil humours of the body may find an exit.

The vernacular name for the process is "*gol*," and a person is spoken of as having or wearing a "*gol*," but the word is not applied to the actual seton itself. For this, which is a piece of wood of the highly vaunted *neem* tree (Melia Azadirachta), another word has been coined, viz., "*gooti*."

It is not easy to calculate the number of persons who employ this procedure, but I am probably nearly correct, after estimations made in the jail and elsewhere, that about 1 per cent. of the adult male population choose to treat themselves thus. The habit is practically confined to old and middle-aged men. Children and young women are never subjected to it. I have so far seen in my peregrinations through the district, only one woman wearing a "*gol*." She was a very ancient, rheumatism-crippled dame at Batajore.

Chronic rheumatism is the ailment, *par excellence*, for which this remedy is sought for by the patient and practised by the Kabiraj. But "*gol*" is also worn for other diseases, dyspepsia, "spleen," and even for cataract. One patient whom I see often in the bazaar here, wears it for elephantiasis of the leg on the affected limb.

The following is the process of applying the "*gol*":—The situation generally favoured is the upper part of the left leg in front at a point about $\frac{3}{4}$ of an inch to the outer side of the anterior border of the tibia and about $1\frac{1}{2}$ to 2 inches below the level of the tubercle. A similar position on the right leg is more occasionally seen, and very rarely "*gols*" are worn on the outer side of either forearm in front about an inch or two below the elbow joint. The Kabiraj takes a piece of iron, less than $\frac{3}{4}$ of an inch in diameter, and makes one end red-hot in a flame. He then pierces the skin at one or other of the above sites for the distance of about half an inch. A "*gooti*" of *neem* wood, shaped like a conical bullet with a flat base, and which is about half an inch long and with a basal diameter somewhat less than that, is then inserted. A portion of banana or other leaf constitutes the dressing. The "*gooti*" is kept in its place by a single fold of cloth which is bandaged over it and tied on the outer side. The bandage is removed and the "gooti" taken out, washed and replaced by the wearer daily. "*Gol*" is often worn for years as some of the cases will show. Frequently, too, when a man is tired of wearing it on one leg, he allows it to heal up and has another made on the opposite limb.

Hindus and Mussulmans of every possible status are alleged to equally believe in this method of treatment, but the bulk of the cases that I have seen have been among the latter.

The custom is worthy of record, and in connection with it, it is interesting to note that it is not so many years since the use of setons was abandoned, if indeed it is altogether so, in Europe. Erichsen in his "Surgery," seventh edition, 1877, mentions the practice, and in 1890 if not later, Professor Alexander Ogston commenced his class of Operative Surgery at Aberdeen by the operation of "Inserting a Seton."

The following are short notes of cases of "*gol*" which have come under observation:—

1. S. M., Mahomedan, aged 50. Had the operation of "*gol*" performed on himself nine months ago on account of rheumatism and has worn it ever since. The "*gol*" is in the usual position on the left leg. On removing the bandage and the "*gooti*," the site is seen to be occupied by an ulcer about the size of a rupee with a smooth circular central depression about half an inch broad and $\frac{3}{4}$ of an inch deep. At the bottom of the depression there is a little sticky ichorous pus. The edges of the depression are formed by raised pale weak granulations with externally a bluish-white layer of young skin endeavouring to grow over them. Around the ulcer the skin is tanned and discoloured from the constant presence of purulent matter.

2. A. K., Mussulman, aged 60. Seven months ago he injured his left heel by a piece of wood falling upon it. This wound refused to heal, and on its account he had the operation of "*gol*" performed. The position of the "*gol*" is the same, and the appearances of the ulcer are similar to the last case. The handle of a nutcracker was the cautery in this instance. The wound on the heel still persists, and the man is becoming somewhat sceptical about the virtues of "*gol*."

3. M. K., Mussulman, aged 75. This man who is in good circumstances, has worn a "*gol*" altogether for 25 years on account of rheumatism. He first had one on the outer side of his right leg for eight years and then for nine years, another on the inner side of the same leg at a similar level (an unusual position). Both these were allowed to heal up, and of them the depressed and pigmented cicatrices remain. Eight years ago as soon as the second one on the right leg healed up, he submitted to the operation for a third time and has ever since worn a "*gol*" in the usual place on the left leg. He thought the "*gol*" had benefited him. His son, who is 48 years old, and who has been afflicted with right hemiplegia for three years, has also worn a "*gol*" for that period on his right leg.