

There are one or two points in connexion with the removal of tumours from the parotid and submaxillary regions which are very well illustrated in these cases. It is extremely advisable that a free incision through the skin should be made at the commencement of the operation, as, in consequence of the firmness with which the tumours are generally bound down at their deep aspects to the adjacent structures, plenty of room is necessary for manipulation with the knife in order to avoid injury to the important structures found in their vicinity. The necessity for this is well illustrated by the circumstances recorded in connexion with *Case 2*, in which, though a fairly free incision was made in the first instance, it was subsequently found necessary to enlarge this considerably to allow of free manipulation at the deep aspect of the tumour.

The profuse hæmorrhage mentioned in *Case 1* as having occurred on division of the facial artery is extremely characteristic of this vessel. The gush of blood that ensued on its section in the case under review was so enormous that for a moment I was under the impression that I had plunged the knife into the carotid artery. The singular profuseness of the hæmorrhage in this instance was due no doubt to the proximity of the point at which the facial artery was divided to the parent trunk; but from my own experience of operations in which this artery had to be divided, even at a considerable distance from its origin from the carotid, I am inclined to think that there is no vessel in the body which, in comparison with regard to its size, bleeds so profusely on section as the facial artery.

### GOALUNDO DISPENSARY.

COMPOUND FRACTURE OF THE CRANIUM, ACCOMPANIED BY SYMPTOMS OF COMPRESSION—TREPHINING—RECOVERY.

BY SURGEON A. TOMES,

*Officiating Civil Surgeon, Goalundo.*

In the *Indian Medical Gazette* of July 1878 there was published by Dr. Freyer a case of trephining for compound fracture of the cranium accompanied by symptoms of compression; notice was also made of two other operations of a similar nature performed by him.

A few months ago I had occasion to trephine, after compound fracture with symptoms of compression, with a result which bears out Dr. Freyer's opinion as to the advisability of operation in such cases; moreover, although operation was not performed *early*, yet it proved successful.

The sequence of events in my case exactly corresponded with those of the one that was recorded; the patient was struck on the head with a *latti*, fell down insensible, recovered consciousness, then became insensible again *gradually*, owing to compression from hæmorrhage taking place on the surface of the brain after the receipt of the injury. The symptoms of compression were well marked and continuous, and had lasted some days\* before admission. Recovery was greatly aided by the care bestowed on the after-treatment by Native Doctor Kherody Chunder Gosamy, who has furnished me with the following notes:—

Adoo Mandel, aged 45 years, was admitted into the Goalundo Hospital on the 6th July 1878, in an insensible condition, suffering from an injury of the head.

The history of the case was briefly as follows. Four days before admission he was struck on the head with a *latti* during a quarrel about some rice crops, he fell stunned, but shortly recovered his senses; subsequently he gradually relapsed into complete insensibility.

\* It was impossible to ascertain exactly how long; his friends said two or three days.

On admission, a scalp wound was seen about one inch long on the upper part of the right parietal region. At the bottom of the wound could be felt a fracture of the cranium extending in an antero-posterior direction, the lower edge of the fracture projected slightly over the upper edge along its whole extent. There was complete loss of consciousness; reflex movement of the limbs could be induced on the right side only. The conjunctiva of the left eye was much injected. Respiration; laboured and stertorous; pulse full; skin cold. The bladder being full, the urine was drawn off by catheter.

*7th July. Operation.*—The wound in the scalp was enlarged by an incision at right angles to it; the periosteum drawn aside and trephining performed so as to remove a portion of bone on both sides of the fracture; the surface of a dense mass of coagulated blood then came into view, a small portion of this came away with the excised bone, and some more was removed by forceps; but too much interference in this direction was not safe, the clot was so tough and adherent. The soft tissues were then re-adjusted and wet lint applied.

*8th July.*—A portion of the clot was found to be protruding, and was removed with dressing forceps through the wound; Castor-oil enema administered. The patient passed water freely.

*9th July.*—Cold lotion and wet lint applied continuously. The patient began to move the limbs of both sides spontaneously; he also began to talk, though incoherently. Congestion of left conjunctiva much less.

*10th July.*—Was able to answer to his name. Motions and urine passed naturally; wound suppurating; perfect quiet and rest with low diet enjoined; slight inflammatory fever.

*12th July.*—No fever. From this time up to date of discharge he continued steadily to recover; suppuration was rather excessive till on the 17th a small piece of necrosed bone came away, and another was removed with forceps on the 22nd.

On the 2nd of September the patient was discharged wearing a gutta percha plate over the seat of injury. He had recovered full possession of his faculties and was in perfect health.

*Remarks.*—In conclusion, I am of opinion that the symptoms of compression were due to hæmorrhage on the surface of the brain, between the cranium and the dura mater, and not to depression of bone. Depression existed from the first to a very moderate degree, but insensibility was not continuous from the first. There was a recovery from the first shock and then a relapse as blood was being poured out.

By the removal of a portion of the depressed bone at the time of operation the clot beneath may have been allowed to expand; it certainly did bulge into the opening made, but it was quite impossible to reduce the line of depression that remained. This, however, did not at all interfere with the man's recovery.

GOALUNDO,  
23rd October, 1878. }

### A CASE OF CHOLERA TREATED BY HYPODERMIC INJECTIONS OF CHLORAL HYDRATE.

BY SURGEON-MAJOR G. GRIFFITHS,

*18th Bengal Cavalry.*

[The following minutely detailed case, for which we are indebted to the Surgeon-General Indian Medical Department, will be read with interest in connection with Surgeon-Major Hall's papers recently published in this journal. The advantage of subcutaneous injections of Chloral hydrate in Cholera is still *sub judice*, and experience bearing upon the subject will be welcomed. The

case was an isolated one; no other having occurred in the station of Bareilly before or after, and a Committee of Medical Officers, which was convened to investigate it, was quite unable to arrive at any conclusion regarding its causation.—ED, *I. M. G.*]

*Cholera.*—No. 759, Sowar Yara Khan, 5th Troop, 18th Bengal Cavalry, aged 29 years; 9 years' service.

PREVIOUS HISTORY.—Was enlisted on the 10th November 1869, and has no medical history of any importance.

19th August 1878, 1 P. M.—PRESENT CONDITION.—Is admitted at 1 P. M., and vomited once as he was brought to the hospital. I first saw him at 2-30 P. M., and he was then quite collapsed; but he had not vomited nor purged since admission, though he was first taken ill soon after parade this morning; there was no pulse at the wrist, his voice was a mere whisper; skin cold, with severe cramps and great restlessness, in short all the characteristic symptoms of cholera in the so-called algid stage.

2-35 P. M.—At 2-35 P. M. I injected five grains of chloral hydrate dissolved in 15 minims of water into the right deltoid, and the same quantity again at 3 P. M. into a different part of the same muscle; and I continued the injections until 11 o'clock this evening, *viz.*, twenty grains into his right vastus externus, and seven grains into his left vastus externus. But, except in the latter instance, I had not yet injected more than five grains at any single time, and I made a fresh puncture always.

Beef-tea and soda water were given whenever he felt thirsty, which he retained. He was purged at 5-15 P. M., at 5-30 P. M., at 6-30 P. M., and at 11-30 P. M., the stools being about half a pint in quantity and quite characteristic. The injections of chloral undoubtedly relieved his cramps, and he slept in snatches between 3 P. M. and 11 P. M. to-day; in fact as soon as he showed signs of restlessness, I put in more chloral. After 15 grains of the chloral had been injected, there was a pulse at the wrist, and his skin felt warmer, but on taking his temperature it was below 95°. He complained of much pain over the spleen, which was relieved by mustard applications and hot fomentations. He did not ask for water, and was not apparently very thirsty.

20th August 1878.—At 2-30 A. M. he was again purged, also about 2-45 A. M., the first about a pint, and the other half a pint in quantity, and of the same rice watery character. No urine had been voided, and I passed the catheter and found the bladder empty.

At 3-30 A. M. his general condition was not much improved; pulse being now perceptible at the wrist. At 3-50 A. M. he became again very restless, and I injected 8 grains of the chloral into the left vastus externus; soon afterwards he went to sleep, and his condition remained good until 5 A. M., when another 5 grains of the chloral were injected into the left vastus externus. At 5 A. M. took some soup which he retained; no urine in the bladder. Had a motion at 8-20 A. M., and another at 9-40 A. M., the latter of a pink color, another at 10-20 A. M., another at 10-50 A. M., another at 11-5 A. M., and another at 11-30 A. M., all of a pink color, and about half a pint in quantity.

At 8-40 A. M. I injected 5 grains of the chloral and also 5 grains at 11-10 A. M., as he was somewhat restless; did not complain very much of thirst, but he took about 12 oz. of milk this morning and retained it.

At 11-30 A. M., his appearance was fairly good, and he slept in snatches after the chloral; but the pulse was not quite so good; no urine in the bladder. So continued the same treatment, *viz.* milk, soup at intervals.

At 12-30 P. M., was moved about 4 oz.	} Color pinkish.
" 1-20 P. M. " " 1 oz.	
" 1-55 P. M. " " 1 oz.	
" 2-30 P. M. " " 2 oz.	
" 2-55 P. M. " " 1 oz.	
" 4-20 P. M. " " 6 oz.	

At 5 P. M. pulse was good, and he has taken nourishment well. No vomiting yet complained of; pain in the hypogastric region. Passed a few drops of urine at 4-45 P. M., and a little at 5-5 P. M.; catheter passed but no water in the bladder.

At 5-15 P. M. of the 20th, his general appearance was more satisfactory; pulse fairly good. Has been free from cramps and slept off and on since 11-10 A. M.; upper part of his body seems warmer, but feet and hands still quite cold; no improvement in his voice. Temperature 95.6°; temperature rising.

At 5-40 P. M. was moved about 6 ounces, and his temperature at 6-35 P. M. was 96.6°. Had another motion at 6-45 P. M., about half an ounce in quantity.

Vomited at 7 P. M., and his pulse became a little weaker. At 7-25 had another motion, about two ounces in quantity and of the same pink color as the former ones; complains at times of pain in his abdomen; relieved however by hot fomentation; the abdomen looks retracted. Temperature at 7-45 P. M. 95.8°.

At 8-30 P. M. had a motion of 2 oz. in quantity.

At 9-5 P. M.	do.	1 oz.	} color
At 9-50 P. M.	do.	1 oz.	

Complained of much pain in his bowels; relieved by hot fomentations; temperature 95.4°. Had another motion at 10-45 P. M., about 2 oz. in quantity of a pinkish red color. Became restless again at 10-50 P. M., and I injected 15 minims of the solution of chloral (5 grs.) into his right vastus externus and he slept almost immediately afterwards.

21st August.—At 1 A. M. had another motion about 3 ss in quantity; at 1-45 A. M. had another motion about 3 ss in quantity. Became again restless at 2 A. M., and 5 grains of chloral injected into the right vastus externus, producing almost immediate relief and sleep.

At 2-35 A. M. vomited about 2 ounces of fluid; at 3-35 A. M. had a motion about 3 ss. in quantity. Again complains of pain in his abdomen, relieved by mustard application and hot fomentations; at 5-30 A. M. had another motion about an ounce in quantity. Temperature 95.8°.

21st August.—At 6-10 A. M. had a motion about an ounce in quantity; at 6-30 A. M. had another about four ounces in quantity. His general appearance this morning is decidedly much better; pulse quite perceptible at the wrist, and his body is warm. To continue the same treatment if he becomes restless from cramps, with chicken broth every half hour.

Had a motion at 8 A. M. about 3 ss. in quantity; another at 9-15 A. M. same quantity; and another at 10-5 A. M. same quantity, color pink. Temperature 95.6°.

At 11 A. M. had another motion, same color as previous was, and nearly same quantity; pulse was very good.

I ordered him 3 ss of castor oil at 11-15 A. M.; at 2 P. M. the patient voided about three ounces of urine, and at 3-30 P. M. had a motion of about 3 ss in quantity of a pink red color, and soon afterwards slept.

At 4-15 P. M. his temperature was 96.4°, and his pulse very good. At 4-55 P. M. voided about two ounces of urine; at 5-10 P. M. had another motion about one ounce in quantity, containing probably bile, it was of a yellowish color. Temperature at 5-50 P. M. was 96.6°.

At 6 P. M. the patient expressed himself as very comfortable, and his voice was much better in quality. Indeed his general condition was quite satisfactory, and I had every reason to think that he would recover, for his pulse was very good, his respirations regular and calm, and his body was warm. At 7-40 P. M. had another motion about one and a half ounce in quantity, containing faecal matter; asked for some food, but was ordered to have nothing but arrowroot and milk.

At 8-50 P. M. seemed again restless, though not cramped, tossing himself about a good deal; his pulse was very good. He remained much in this condition

until 12 P. M.; had neither vomiting nor purging; voided no urine; took his food very well.

*22nd August.*—Soon after 12 o'clock (midnight 22nd) showed signs of being slightly delirious, sleeping occasionally and waking up suddenly and trying to get out of bed; at 2 A. M., his temperature was taken and found to be 96.2°; pulse good. At 4 A. M. his temperature was 98.0°; at 5 A. M. his feet and hands became cold, and his pulse was feeble and intermitting; respiration more rapid though not shallow.

At 6 A. M. passed a motion involuntarily; his respirations still rapid, and he breathes with his mouth open; pulse very feeble; temperature 96.4°. Soon after this he became suddenly worse; had scarcely any pulse, with feet and hands very cold, but his body temperature was 98.0°; his respirations became extremely rapid and shallow, and his mouth was open; his eyes were also widely open, with both pupils dilated, but he was not yet quite insensible. I noticed him moving his left arm and leg, but the right side was perfectly motionless, and upon closer examination I found that there was hemiplegia of that side. I passed No. 10 catheter, and about half an ounce of urine was drawn. I now ordered mustard poultices to his feet and a blister 3×3 to the nape of his neck, but there was no improvement, and the man died comatose at 10.35 A. M. Temperature taken after death 101.2°; no *post mortem* allowed.

*Remarks.*—It is much to be regretted that there was no *post mortem* in this case, as the cause of death remains undetermined. There is, however, every reason to believe that the cerebral complications above detailed were certainly not immediately due to uræmic poisoning, unless indeed there was a relapse. With regard to the treatment adopted in the case, *viz.*, the injection of a solution of chloral hydrate (five grains in 15 minims of water) into the muscular system, there can be little doubt of its importance, and that it answered admirably in relieving cramps and inducing sleep.

Reaction appears to have commenced at 9.40 A. M. on the 20th exactly 24 hours after the man was attacked, for although he was admitted at 1 P. M. on the 19th, it must be recorded that he was taken ill soon after parade on the 19th August. Reaction was not however established until the afternoon of the 21st August 1878, and there was no secondary fever.

*Bareilly, Aug. 25, 1878.*

## SHORT SKETCH OF TWO CASES OF CHOLERA.

By SURGEON-MAJOR L. E. EADES,  
*17th Native Infantry.*

*1st Case.*—Sepoy Sheonarain Opudhia was admitted to hospital in collapse at 2.30 A. M. of the 28th August. Temperature 97.4°; sighing respirations, 18 in number; no pulse in radials; very feeble even in carotids; cold sweat over body; breath felt cold to hand.

Chlorodyne in large doses given by hospital assistant. I administered chloral twice by hypodermic injection and once by mouth.

Hypodermically he had 12 grains, by mouth 20 grains, total 32 grains. He never rallied, but died at 7.45 A. M. same day in collapse. No *post mortem*.

*2nd Case.*—Havildar Khushiyal Sing was in hospital and convalescing after dysentery. History, two bilious motions, one at 2 A. M. another at 3 A. M., 2nd September; treatment, dilute sulphuric acid in water (drachm doses of acid) every two hours.

Fell suddenly into collapse at 5 A. M. same date; treatment, 6 grains chloral hydrate hypodermically every half hour if awake; temperature rose from 96.4° at 5 A. M. to 101.6° at 1 P. M., when reaction was established.

Had 48 grains chloral hydrate hypodermically. Despite all treatment temperature continued to rise till 4 A. M. of 3rd September, when he died with symptoms of acute congestion of the brain and lungs 23 hours after being attacked with symptoms of cholera.

*Remarks.*—Dry cupping over loins, sinapisms over heart and abdomen, frictions of ginger on arms and legs, and plenty of cold water with ice were also employed in both cases.

First case had not a fair trial of Surgeon-Major Hall's chloral hydrate treatment, as he objects in *to toto* to any administration of opium. Chlorodyne had been given in large doses by the hospital assistant. He died in collapse.

Second case had a fair trial throughout from invasion to death. He survived the collapse, but died in secondary fever with symptoms of acute congestion of the brain and lungs.

Caustion of cholera I have not as yet been able to determine like most other men. Treatment I am equally in the dark about. Prevention of course the same.

*Morar, Gwalior, 3rd October 1878.*

## A CASE OF COMPOUND COMMINATED FRACTURE OF THE FEMUR.

By A. B. MORRIS, *Planters' Doctor.*

*Formerly Civil Medical Officer, Kurseong.*

On the 9th August 1878 at noon I was called to see a shop-keeper named Buksh, aged 43 years. He was brought to the Kurseong Dispensary with the following history. At 6 A. M. on the above date while walking along a hill track, about six miles from Kurseong, he was struck by a falling rock, which broke his right thigh at the upper third; a large portion of his upper lip was also torn away.

He was carried up to Kurseong on a rough stretcher, and arrived at the dispensary in a very exhausted state, owing to loss of blood and general shock. Some whiskey and water was administered to him, the injury examined, and found as follows:—Over the site of the fracture, was found a wound an inch or so in diameter, through which one could easily feel loose and sharp pieces of bone. The muscles of the thigh were much bruised and retracted just below the knee, and to its inner side was another wound from which a great deal of hæmorrhage occurred. The nature of the injury was explained to the patient, and his sanction for removal of the limb obtained. He was placed under chloroform, and with the assistance of the hospital assistant, amputation by the side flap method was performed. The flaps were adjusted by wire sutures, and water dressing applied. A considerable amount of collapse followed the operation, but this was satisfactorily met by giving stimulants and applying heat to the body. The patient's strength was kept up by strong soups, milk, eggs, and stimulants, as required. The fever and restlessness which followed the operation, were treated with quinine and Dover's powder gr 5 each every four or six hours, and a double dose of Dover's at night if sleep was not obtained. Everything went on favourably until the third day, when a good deal of sloughing with a profuse and unhealthy discharge set in; in consequence of this the sutures had to be removed. The sloughs were removed by scissors and the adjoining tissues treated with solid nitrate of silver and sulphate of copper. Carbolic acid and oil 1 in 10 was substituted for the water dressing, and the wound was carefully cleansed with carbolic lotion 1 in 20. The flaps now gradually resumed their healthy appearance. Later on it was found necessary to apply three more wire sutures, after which the case went on favourably, and the patient recovered with a good stump.

*Kurseong, Sept. 18th, 1878.*