ACCOUNT
OF
THE EFFECTS
OF
THE BITE OF A WILD JACKAL
IN A RABID STATE,

AS THE SAME OCCURRED IN THE DISTRICT OF
KATTYWAR IN THE EAST INDIES, IN 1822.

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COMMUNICATED

By DR. BABINGTON.

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IN the year 1822, the First Battalion Fifth Regiment Bombay Native Infantry, of which I had the medical charge, was proceeding on field-service with a regiment of Native Cavalry in Kattywar. The latter were encamped about a quarter of a mile from the infantry. One night I was roused by a considerable noise and bustle in the cavalry lines, which I attributed to some of the horses breaking loose from their pickets. Next morning I learnt, on inquiry, that, in that part of the lines chiefly occupied by the grass-cutters, they

had been much annoyed by the visit of a jackal, an animal very common in the neighbourhood of large villages in India. The night was dark, and the animal had got unobserved into the lines, and entered several huts of the camp followers, snapping and biting at every one he met with. Several of the men were roused by a bite of the animal either on their arms or feet, which were uncovered while asleep. The alarm was given, and the animal, after a chase up the lines, was at length killed; and this occasioned the hubbub I had heard, as before noticed. The bites of the animal had mostly drawn blood, but were very slight and superficial. Those I saw, being about a month after the incident, were like scratches, and dried up. The animal, I understood, was in a state of exhaustion, and much enfeebled from disease and starvation. It was not known to be mad, nor are the natives acquainted with the consequences of the bite of a rabid animal. The matter therefore passed off as a common incident of the day.

About a month after this occurrence circumstances presented tending to shew that the jackal was in a rabid state, and that hydrophobia resulted from its bites. Such of these as came under my observation I have to notice in the following cases.

CASE I.

My native hospital-assistant informed me that a young man was lying dead a short distance from

my tent, in the open fields. I went along with him to see the body, with a view to ascertain the cause of his death. The deceased, a native, was a robust young man who appeared to have died from suffocation. There was great contraction of the glottis, as if brought on by spasm. The throat was swollen, face rather flushed. No marks of violence being observable, his friends were called on and interrogated as to what information they could afford to account for his sudden death. They mentioned that lately he had shewed strange symptoms of madness, complained of a sense of strangulation when he attempted to swallow, and had a horror at the sight of water, and, fearful of being suffocated, he had before ran out into the open fields. On being questioned as to his having been bit by any dog, they replied he had not ; but spoke of his being bitten in the face by the jackal on the night that one was killed in camp ; before which he never complained. He had been gradually getting worse for the last few days past, and they did not suspect the cause.

CASE II.

A few days *previous* to finding this young man lying dead in the fields, I had a native, aged about 30, under treatment, labouring under extreme dejection and nervous excitement. The glottis appeared rigid, the throat was much complained of, deglutition difficult and painful. Con-

ceiving the case to be chiefly an affection of the fauces, local applications were made to the throat, and the usual remedies were ordered.

On the second day he refused to take any medicine, and his nervous irritability increasing, he was carried off in convulsions that same night.

My native assistant, who had never seen a case of hydrophobia before this, or known its symptoms, on the particulars of the former case being related in his hearing, now, for the first time, stated there was a great coincidence of symptoms in the two cases. He remembered the deceased native under treatment for an affection of the fauces, that he shewed a great dread of water, and would not swallow the medicine because it was in a liquid state, and that he was under frightful imaginations about trifles when disturbed, &c. I ordered him to inquire of the friends and companions of the deceased, if he had been bitten on the night in question by the jackal, and the result was that he had, and had shewn the part bitten to several, relating the circumstance.

CASE III.

The effect of the bites of the jackal in the above instances began to excite some attention, more especially when another native, a middle aged man, was found early one morning about this

time dead, and without any marks of violence about him. His appearance, from a few particles of blood found on the grass, led to a belief that he had died convulsed. Inquiry as to the cause was set on foot, and it was clearly ascertained that he had been bitten by the jackal.

CASE IV.

Some of those that had been bitten were now induced to apply for medical relief, when the symptoms shewed themselves. My native assistant informed me that a woman who had been bitten by the jackal was now suffering under symptoms somewhat similar to those observed in the preceding cases, and wished me to see her. I was glad to find an opportunity of arresting the disease if possible, and ordered her to be brought up immediately. She was under great anxiety, and very restless, had a spasmodic contraction of the glottis, great oppression at the pit of the stomach, and sense of suffocation; on being exposed to the air to look at her, her countenance shewed she was under great alarm, and she covered her face in a hurried manner. Her friends said she could not take any kind of drink, and could with difficulty be made to swallow any food. The symptoms had been coming on some few days previous to their applying for medical aid. She pointed to her throat and pit of the stomach, when asked where she felt pain or uneasiness. Being satisfied the

symptoms were those of hydrophobia, and that the affection of the glottis was the most dangerous, I ordered the patient to have her throat and epigastric region rubbed with strong mercurial ointment mixed with a small portion of camphor, and the friction to be kept up for an hour at a time, without regard to quantity expended; the throat to be kept warm with flannels after the frictions, which were to be as often as could be done without distressing the patient too much. To hasten the effect of the mercurial course on the salivary glands, ten grains of calomel, mixed in a little powdered sugar, were ordered to be sprinkled on the tongue, and given every eight hours till further orders.

To bring on a flow of saliva, and discharge from the salivary glands, a mixture of aqua ammoniæ, ol. oliv. and aq. pur. in the usual proportions to form a strong stimulating expectorant, was ordered to be given by tea-spoonfuls, which, it appears, was effected. These remedies were pushed as far as circumstances would admit, and on the third day, a flow of saliva was effected, which was the object in view. The mercurials were regulated and withdrawn as salivation advanced; and in proportion as the saliva ran from the mouth, the deglutition became less difficult, the dread of swallowing and the pain at the pit of the stomach wore off; and her mind became composed and easy as the danger was removed.

In the course of twelve days all symptoms were entirely gone ; the mouth, however, remained sore for some time afterward. The woman was suckling.

CASE V.

A man, about twenty-five years old, applied for relief under extreme mental anxiety. His wild appearance and fears, and refusing to take some medicine offered him, the tremor he was in at the thoughts of swallowing, and the information that he was one who had been bitten by the jackal, confirmed my suspicion of his case being of the same description as the others.

He shewed the first symptoms about ten o'clock in the morning after he came to me, but had been for some days getting dull and melancholy. The plan of treatment was precisely as ordered in the former case, but I soon found the disease was much farther advanced, as deglutition was entirely suspended, and the least attempt to make him swallow brought on the greatest disturbance of the abdominal muscles and diaphragm, and he became almost frantic. He vomited slime and watery matter two or three times. He was glad to cover himself up from the air and the sight of objects, and he had a violent thirst. These symptoms increased rapidly, and he became so restless as to be

kept under restraint by attendants to prevent his running about and doing mischief. At intervals he was quite rational, and, in a hurried way of talking, assured me he could not, from what he felt, last out long. He was soothed, and the hopes of a cure held out by his becoming resigned and quiet; but, on the next day at four o'clock, the continual restlessness of the patient, and the "burning sensation of thirst", as he called it, had so exhausted him, that I despaired of his living long enough to get the salivary glands affected by frictions, which was all that we could do under his unruly and restless state.

The thirst being so intolerable, he was resolved to make a desperate attempt to get down some gruel, which, when he had got a spoonful in the throat, brought on so violent a convulsion as to carry him off. He was not in the least affected by the mercurial frictions, or the calomel he might have got down.

I regretted this failure very much. Had he lived long enough to have had a complete salivation, I should have had sanguine expectations of his doing well, from the result of the former case.

The same characteristic symptoms were conspicuous in all the five cases. The affection of the glottis was always predominant, and next that of

the pit of the stomach. Deglutition was always much dreaded and difficult; and great mental anxiety was present.

Three other persons presented themselves to say they had been bitten, and shewed the marks or scars of the bites, which (except in one instance which was a foul looking sore) had all dried up. No symptoms had appeared. They left their names and places of abode with my assistant, that we might be apprised, in case any should subsequently become affected.

The mouth and jaws of the jackal when killed were found to be covered with frothy saliva. The liver was examined and found quite diseased and rotten, with pus in some parts from small abscesses.

Blackheath,
June 20, 1825.