

portant railway station,) was admitted a patient of the infirmary, under my care, on the 30th of July, 1820. She had been fifteen months under treatment, suffering much, during the whole time, from permanent involuntary contraction of the four powerful muscles forming the quadriceps extensor femoris, the whole of which were in an extremely rigid state. She walked without pain, but an inability to bend the right knee in the least gave her the appearance of walking with a wooden leg; and during the whole of this time she had been unable to kneel. The warm-bath, fomentations, frictions, and many other means, had been persevered in, for a great length of time, without producing the least effect upon her complaint. In reflecting upon this case, I persuaded myself this state of the muscles had originally been produced from some such cause as my own case, and that it was now continued by the force of habit. I also thought, if I could succeed in completely relaxing these muscles, and keep them in that state a few hours, the balance of power between these muscles and their antagonists, the flexors, might possibly be restored, and thus a cure effected. I proceeded to try this plan the following morning. I placed her upon the bed on her left side, and taking hold of the ankle with my right hand, grasping the thigh with my left, in the course of about ten minutes I succeeded in drawing back the heel, and pressing it against the buttock, thus producing a perfect flexion of the limb. This was not accomplished without considerable management, for the muscles made many attempts to overpower my efforts; but whatever degree of relaxation I obtained, I did not yield; but by gentle friction, and perseverance, my object was at last gained. It was gratifying to perceive that the rigid muscles became now perfectly relaxed. In order to destroy the tendency to reaction, two leather straps, with buckles, were placed, while the limb was in this position, tight round the upper part of the thigh and ankle, thus fixing the limb in this position, with the heel touching the buttock. She remained, by my orders, bound in this manner, and lying upon her side, until my visit on the following day, upwards of twenty-four hours. The success of my practice was perfect. On being released, it was found the muscles, which had been for so long a period contracted, were quite relaxed; and not only so, but the tendency to involuntary contraction was entirely destroyed. She walked without limp, without pain, and with the perfect action of the hinge of the knee-joint during every step she took. Suspecting, however, it might return, she remained an in-patient ten days. No return of the complaint took place. She was made an out-patient, and appeared as such.

Aug. 30th.—She was perfectly well, and had suffered no relapse. She brought with her a letter from her surgeon, requesting to be informed the means which had been adopted for her cure, which I communicated to him.

Oct. 4, 1846.—I received a letter from the late Mr. Spink, requesting me to meet him in consultation, on a case at Tollstone, near Tadcaster. I found Master S—, a fine boy of seven years of age, had been twelve days confined to bed and the sofa, in consequence of a blow he had received on the body from a playfellow at school. Considerable pain took place, he was put to bed, and the usual remedies applied.

When I saw him, he was lying on his left side, with the knees drawn towards the abdomen; he was in much pain, had been twelve days quite unable to put his foot to the ground, or alter the position of the foot, without acute pain; and it was suspected that there was some acute disease of the hip. After examination, finding some of the abdominal muscles and also those of the thigh in a painfully contracted state, I rubbed them, and, by gentle means, gradually brought down the thigh; I then gently pushed back the chest, and in five or ten minutes I ascertained that the painfully contracted muscles were relaxed and also at ease. I now took my patient in my arms, and placed him on the floor with the left leg foremost; ascertaining that in this position the muscles still remained relaxed, I left hold of him and confidently requested him to walk;—to the great surprise of his surgeon, and gratification of his father and mother, he walked well, and at ease, without limp or lameness. The cure was immediate and perfect, and no relapse took place.

I will not occupy your time by relating more of these cases; you will believe me when I say, I meet with them frequently, and many of you have had opportunities of seeing them in my practice. It is now more than twenty years ago since Dr. Williamson requested me to give him a short essay on some practical subject for the *North of England Medical Journal*; I gave him this subject, it was published in the second number of that journal, and from thence inserted entire in *THE LANCET* and the *Medical Gazette*.

Whatever muscles you find in this state, let it be your object to place their origin and insertion as far apart as possible; this secures a relaxed condition of them; maintain them in that state for some time, their opponents will then be gaining strength, and the balance of power will be restored. I often see the masseter in this state, and cure it by the gentle insertion of a wedge into the mouth. It is this state of the sterno-cleido mastoideus which forms wry-neck, and I have several times succeeded in effecting a cure in recent cases by turning the chin to the opposite side, and keeping it there a few days by mechanical means. The muscles about the shoulder-joint often get into this state after accidents, and render the arm of very little use for months and sometimes for years. This state of the shoulder I have often cured by the same manoeuvre formerly mentioned, placing the bend of the elbow on the crown of the head, with the fingers touching the ear on the opposite side, and keeping it in that position a few hours. The biceps sometimes remains for some weeks in this state after treatment for fracture of the forearm; the muscles of the fingers also, after injuries of the hand. The powerful extensor or flexor muscles of the thigh after long-continued, extended, or bent position of the limb in the treatment of fractures or other injuries, are left in this condition. The gastrocnemii and other muscles of the leg are often allowed to get into this state during the treatment of diseases or accidents of the foot or ankle, and often require more management and time to remedy it after the cure, than the original disease.

More than thirty years ago I often suffered from a painful spasm of some small muscle under the angle of the jaw, which I believed to be the digastricus. On one occasion I accidentally ascertained that the pain was instantly relieved by opening the mouth wide, and keeping it thus a few moments. Some years afterwards I was consulted by Mrs. G—, who had often been affected in the same manner for many years. I mentioned my case to her, and advised her to try the same means. The plan answered for her, and by relieving the spasm at once, the tendency to its return was afterwards entirely prevented. Cramp in the leg from spasms of the gastrocnemii is instantly relieved by seizing the foot, and pressing its dorsum towards the front of the leg, thus bringing down the heel.

Gentlemen, whenever you meet with cases of this kind, remember those I have placed before you and the observations I have made; follow the same practice, and you will often have the same satisfactory result. I could give you many more examples; but the few I have brought before you have been sufficient to explain the practice to be followed in such cases. My object in giving this lecture will be fully gained, if, when you meet with these cases, you recollect what has here been stated, and do not overlook them. Remember, your medicines, your embrocations, your frictions, fomentations, and warm baths, will be of little avail; but place the origin and insertion of the contracted muscles as far apart as possible. They will then become relaxed; maintain them in this relaxed condition for a length of time, and the tendency to contract will cease. In the mean time, the antagonist muscles will gain strength, the balance of power will be restored, and the natural action of both sets of muscles will be obtained.

## ON LEPROSY AND ELEPHANTIASIS IN SOUTH AFRICA AND INDIA.

By J. BERNCASTLE, M.D., M.R.C.S., &c., London.

LEPROSY is a very common disease throughout the Cape colony, and elephantiasis is also of frequent occurrence. These two diseases are considered quite distinct from each other by many surgeons; but they appear to have several features in common, and often to run into each other. A man affected with genuine elephantiasis of the legs for years will often take on leprosy ulceration, the "*facies Leontodes*," &c.; so that I am strongly inclined to think there must be some connexion between the two, and that they may be considered as varieties of the same class of disease. An eminent surgeon to a public hospital in India, and several medical men at the Cape, who had seen much of these affections, confirmed me in my opinion, which was formed from a limited field of observation. Leprosy very often first attacks the joints of the fingers or toes, in which a slow ulcerative process goes on gradually until they drop off; the large joints are not spared, and sometimes the entire foot or hand is thus lost. This may occur at any age, and is hereditary in families. One healthy native woman, whose husband was a leper, had three children affected with it.

Natives and people of colour are more subject to it than

white men, who are not, however, entirely exempt at the Cape, but I have only seen it in the former. It is not contagious in any degree; people have slept with lepers for months, and have been inoculated from them with impunity. The population at the Cape consider it contagious, and will not allow a leper to appear in the streets, where he would be mobbed; on that account, and from the unsightly appearance of such miserable beings, as well as from motives of humanity, the government have always kept them in establishments devoted to that purpose, several of which existed in different parts of the colony. Of late they have all been removed to Robben Island, in Table Bay, where there is a fine institution, under a resident medical superintendent, that contains at present upwards of 100 patients. Contrary winds alone prevented me visiting this, in a medical point of view, most interesting spot. Satyriasis, generally mentioned by authors as a feature in this disease, is never here found to accompany it, and I think must be some antiquated notion, founded in error, as quite the contrary to it is more frequently observed. At Simon's Town, I visited, through the kindness of Mr. Shea, the resident naval surgeon, two cases of elephantiasis, here called by the people leprosy, of which I subjoin a report.

It is essentially a disease of debility of a very chronic and intractable nature, pursuing its course with a malignant character, little controlled by medicine, until it ends in a gradual breaking up of the constitution; the lungs become affected, and hæmoptysis is a frequent termination to the patient's sufferings. Large indolent ulcers occur mostly upon the extremities, not painful, the edges having a disposition to heal, but only to break out again. The pulse is remarkably languid, feeble, and slow; the tongue unaffected; the intellect not impaired. The disease is very insidious in its attack and subsequent progress. The first place in which it shows itself is generally the lower lobe of the ear or under the eyebrows, where a thickening of the skin takes place, which may not be noticed by the person until the gradual extension of the complaint to other parts first calls his attention to it; in time, one or both legs become enlarged, constituting "elephantiasis," and the face may or may not become swollen, and give the peculiar symptom of the "*facies Leontodes*," but any minor degree of swelling does not impart that aspect. In such a case, leprosy ulcers break out on the legs or feet, which may drop off, as often occurs in genuine idiopathic leprosy when the affection begins, *ab initio*, with ulceration and total loss of joints. Both these diseases are generally found amongst the lower classes of natives, who have little faith in medical treatment, but prefer nostrums of their own making, and herbs of their own choice. Iodine, mercury, quinine, steel, arsenic, mineral acids, and all other potent remedies, have been fairly tried, but without any favourable result. Those who have had most experience in this disease have found more benefit to arise from twenty minims of Donovan's solution of hydriodate of arsenic with mercury, twice or thrice a day, until the gums are affected. Great attention to cleanliness, ventilation, and a proper diet, with pure air, are of more service than medicine.

In the present state of our knowledge, little seems to be known about the causes, pathology, or successful treatment of elephantiasis or leprosy. Some consider them two distinct diseases; others, I think with more reason, look upon them as connected with each other. Probably it is the same leprosy as spoken of in Holy Writ. In India there is no popular prejudice against persons so affected, who are commonly met about the streets; and many *Coolies*, with very well marked elephantiasis about the legs and face, are found working in the streets, the scanty garments of the Hindoos causing them to be easily detected by the passers-by. I saw in the Bombay Native Hospital several very chronic cases of leprosy, where the smaller joints were the principal parts affected.

The following are the notes of two cases of elephantiasis which I observed at the Cape of Good Hope.

CASE 1.—Thomas, aged seventy, a negro, formerly employed in the dock-yard, has always been an active, temperate man, a water-drinker; has had it four years. His pulse is very feeble, slow, and compressible; tongue moist, with a peculiar huskiness of voice, which seems to depend upon thickening about the larynx and air-passages. He had the aspect of the "*facies Leontodes*," and had ulcers on the legs the size of a crown, which were taking on a healthy action. He complained of no pain; had not been under medical treatment for some time, but applied fresh leaves to the wounds; his appetite and intellect were good, and not being in want, he remained at home instead of going to Robben Island.

CASE 2.—Henrick, aged thirty-three, a Malay, by trade a

tailor; formerly of intemperate habits; does not now care about liquor; feels worse after it; sleeps well; appetite and intellect good; sight also; pulse and voice the same as the other man's; has never had satyriasis, but quite the contrary. He has on the legs, large, deep, flabby ulcers; the scrotum was slightly affected. He felt no pain, and having taken at one time various medicines, without much relief, did not care about treatment. In this case the "*facies Leontodes*" was gradually coming on.

Albany-street, Regent's-park, 1851.

## OBSERVATIONS ON PUSTULE MALIGNÆ, AS COMMUNICATED TO THE AUSTRIAN, PORTUGUESE, AND DANISH GOVERNMENTS.

By C. TRENERRY, M.R.C.S.E., L.A.C.

ASSISTANT-SURGEON TO THE CIVIL HOSPITAL, GIBRALTAR.

It appears Christoba Martinez, aged sixty, a Portuguese by birth, presented himself as an out-patient of this hospital on the 21st of October, 1850, suffering from the pustule maligne; he stated that he had been navigating on board a vessel laden with wool and salted bullocks' hides from Larachè.

On the 14th of the following month, Manuel Fernandez, aged sixty, a relative of the above, was admitted with a similar disease; he said he was a fisherman, and had not been near any wool or hides.

Francisco Lapeña, aged forty-eight, a Spaniard, and Francisco Docarmen, aged sixty-eight, a Portuguese, both mariners on board a Portuguese vessel laden with hides and gum, were similarly affected.

Jose Pedro, aged fifteen, a Portuguese, had not been near any vessel, wool, or hides for fifteen days, but notwithstanding became affected with the disease, as did also Juan Bayestero, who had not been near the source of contagion for five days.

Juan Catania, aged thirteen, said he was standing on the wharf one Sunday afternoon, when he experienced a slight itching of the right upper eyelid, and the following morning the characteristic pustule showed itself.

On the 2nd of March, 1851, Lorenzo Pau, aged twenty-two, became affected, after being engaged in weighing salted hides on board a vessel that came from Tunis.

The disease was characterized in the above patients experiencing a slight itching in some part of the face, followed by a small pimple having a dark depressed centre, surrounded by several almost imperceptible phlycteneæ, from which oozed an ichorous fluid; the glands of the neck on the affected side, but more especially the parotid, became enlarged and indurated; the head, face, neck, and upper part of the thorax were afterwards frightfully swollen and disfigured, the tumefaction having a peculiarly tense and elastic feel; the respiration was laborious, and attended with a singular croaking sound, whilst the voice was of a disagreeable guttural nature.

Two of the cases terminated fatally a few hours after admission; the one with symptoms of suffocation, and the other of apoplexy; the rest had a very protracted recovery, but more particularly the first case, whose life was compromised on different occasions by extensive suppuration and sloughs having formed on the left side of the face and neck, attended with frequent alarming attacks of hæmorrhage, so much so, that on one occasion my assistance was suddenly called for by Drs. Mery and Cortes, (who had the chief care of the patient at his own residence,) and it became a question whether the carotid artery should not be ligatured; the poor fellow was spared the operation, and recovered after nearly four months' suffering.

The treatment consisted in an immediate and free application of the actual cautery to the affected spot, and afterwards the diacetate-of-lead lotion, which were sure to arrest the disorder if applied within twenty-four hours from its appearance; the bowels were cleared out by an aperient; and other symptoms, such as fever, suppuration, and sloughing, were treated on general principles.

The disease is generally considered contagious, and to depend upon carbuncles, or some peculiar virus existing in the hides at the time the animal is slaughtered, which remains permanent, and whatever preparation the hides or wool undergo, it cannot be destroyed; therefore, whether sitting on a hair-bottom chair, lying on a woollen or hair mattress, carrying a hair-trunk, or wearing a woollen garment made