

Had the air passed to the lung—consolidated (grey hepatisation) as it was—the difficulty must have been much increased. It is not at all unusual to find the lung infiltrated with caseous matter, where the root is affected by cancer. I recently made a post-mortem upon a case of cancer (scirrhus) of the penis, where this condition was well-marked in the left lung, secondary scirrhus deposit having attacked the root of the lung, and also the kidneys. I know of no means of recognising cancer of the heart during life, though it often occurs when the new growth occupies the anterior mediastinum.

PERFORATING ULCER OF THE FOOT AND PROGRESSIVE LOCOMOTOR ATAXIA.

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PROF. BALL and M. THIBIERGE, in a paper read before the recent International Medical Congress,¹ have endeavoured to show that there is a "direct connexion" between perforating ulcer of the foot and locomotor ataxia, and bring forward twelve cases to demonstrate that circumstance. They assert that the foot sore has a twofold association with the spinal ailment. It may be one of the earlier or premonitory symptoms of the cord disease, or, on the other hand, it may prove one of the late or terminal manifestations. Before remarking upon these important conclusions I may detail a case now under my care in the London Hospital that would appear to bear out the assertions just made.

The patient is a single woman, a cook, aged thirty-nine. There is nothing important to note in either her family or personal history. Five years ago she developed a suppurating bunion over the left great toe. In about eighteen months this healed, and gave no further trouble. Shortly after it healed—i.e., about three and a half years ago—a perforating ulcer appeared over the head of the metatarsal bone of the second toe. This was preceded by a painful corn, under which an abscess formed. The ulcer is said to have led down to bare bone. Under treatment at the Infirmary at Eastbourne the sore healed, but soon broke out again. It healed and reopened several times, and became at last so troublesome that the left foot was amputated (Chopart) at the Eastbourne Infirmary some eight months ago. After the healing of the stump, which is firm and substantial, she returned to her work, and her feet remained sound until six weeks ago. At this time she developed a perforating ulcer over the head of the metatarsal bone of the second toe of the right foot. It was preceded by a corn and an abscess, as was the sore on the left foot. Shortly after this a like ulcer appeared on the most prominent part of the stump of the left limb, appearing in like manner after a dense corn, beneath which suppuration had taken place.

She has now a circular callous ulcer surrounded by horny epidermis on both the right foot and the stump of the left foot in the situations indicated. The former leads to bare bone, the latter to a sinus three-quarters of an inch in depth. Seven weeks ago she began to stagger in her gait, and has since then fallen down several times when walking. She is now remarkably ataxic in her lower limbs, the upper extremities being sound in that respect. She cannot walk without assistance, nor can she stand when the eyes are shut. There is anæsthesia of both lower extremities, which is somewhat unequally distributed as to degree. There is absolute absence of tendon reflex in both limbs. The feet do not sweat in excess, nor has that feature at any time been observed. The pupils act during accommodation, but are absolutely inactive to light. Her vision is normal. She has no strabismus, and there is nothing especial to note in her fundus. She has had "lightning pains," but no gastric disturbances, no neuralgia, and no trouble with her sphincters. It will thus be seen that the original ulcer of the left foot made its appearance before any evidences of ataxia had developed, and if one could accept without reservation MM. Ball and Thibierge's assertions as to the relation of this ulcer to locomotor ataxia, it will

be obvious that the sore assumes a very remarkable importance in general medicine. Unfortunately MM. Ball and Thibierge's statements are not made without reservations. They are forced to recognise more than one form of perforating ulcer of the foot, and of the possible varieties they only assert that one form has part with the spinal malady. Their general conclusion as to the nature of the sore is that it is "a tropical disease of nervous origin," a conclusion closely in accord with that expressed by Messrs. Savory and Butlin in their admirable monograph,² wherein they assert that "the so-called ulcer is the result of pressure or violence to structures whose nutrition is impaired or whose vitality is defective from disease or degeneration of the supplying nerves." Now the many contributions that have of late years been made to the pathology of this foot affection would tend to claim for it the dignity of a special disease, and give to it a very pronounced clinical individuality. Thus the French authors above mentioned would place one form of the foot sore among the specific manifestations of locomotor ataxia, and from their paper one would gather that they consider its relation to the cord disease as close and as pronounced as are the relations of the affection known as Charcot's joint disease. Messrs. Savory and Butlin moreover, in the monograph referred to, are disposed to give the following clinical picture of perforating ulcer:—It is an affection more common in men; it attacks certain parts of the sole; it is commonly symmetrical; it is particularly associated with a certain amount of anæsthesia of the part, with sweatings of the foot and with certain peripheral nerve-changes. That foot sores are met with with these characteristics no one would dispute, but the grouping of these various characters so as to form one special disease may, I think, be a matter open to question. I have had under my care during the last few years three men with ulcers situate on the soles of the feet, that were symmetrical, that were preceded by suppuration beneath a corn, that led down to bare bone, and that long resisted treatment. In no one of these cases was there any anæsthesia of the part, nor any undue sweatings of the foot, nor any evidence of nerve affection of any kind. One man has been under observation at various times for two years, and is still free from any obvious trace of nerve disease, either central or peripheral. In these three individuals I imagine that the disease is solely and purely local—as purely local as a bed sore under the heel of a man confined to bed with a fractured femur. A corn forms; it presses like a foreign body upon the soft parts beneath; that pressure leads to suppuration; the pus moves deeply on towards the parts offering the least resistance, and by the time that it has found its way through the dense corn-tissue, it has probably in the other direction reached the bone. That any lesion of the nerves of the extremity would favour the development of such a local sore is obvious; just as a bed sore would be more likely to occur in a subject of paraplegia than in a patient bedridden with some other than a disease involving gross nerve change. In one of Messrs. Savory and Butlin's cases the patient appears to have suffered from some infantile affection of the nerves of the limb, and yet from a perusal of the paper one gathers that the symptoms of that nerve affection are included among the individual features of the sore that in time he developed upon his sole. I imagine that it would be more correct to ascribe the anæsthesia, the sweatings, and the microscopic changes in the nerve-trunks, to a central or peripheral nerve disease in relation to which the foot sore is a mere coincidence. To make use of these characters to complete the clinical individuality of the ulcer appears to be on a par with a description of a bed sore in paraplegia, as a sloughing ulcer associated with loss of power in the lower extremity, with anæsthesia, with certain visceral troubles, and with certain gross changes in the cord; all these features being maintained to be essential to the clinical individuality of the sore.

I would urge, therefore, that this "perforating ulcer" is a purely local affection, produced by purely local causes, which causes would act with increased vigour upon a part whose vitality is in any way impaired, but that that impairment is not of necessity dependent upon disease or degeneration of the supplying nerves. The relation of the malady, therefore, to locomotor ataxia would appear to be quite casual and unimportant, and of no more clinical value than would be a burn on the sole of an ataxic subject who

¹ Transactions, vol. ii., p. 52. London, 1881.

² Transactions of the Medical and Chirurgical Society, vol. lxii., 1879, p. 373

had unconsciously brought his foot in too close contact with fire.

In conclusion, exception may fairly be taken to the somewhat misleading name applied to this sore, since it does not appear to really perforate the foot in any ordinary case. Indeed the selection of its especial title appears to have been founded upon the same grounds that influenced Bottom in selecting a title for his vision, and of which he is reported to have said, "It shall be called Bottom's Dream, because it hath no bottom."

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REMARKS ON PROSTATORRHOEA.

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(Concluded from p. 618.)

IN Case 2, given in the patient's own words, those of a highly intelligent gentleman, there were no spermatozoa in the discharge. The cause in this case seemed an aggravated varicocele, a condition which appeared to operate in a twofold manner, the one mechanical, the other physiological. In the former, the veins being large and valveless, a remosa is induced in the sexual apparatus—a condition of chronic passive congestion and irritation; in the latter pressure on the spermatic nerves causes peripheral reflex excitability by operating through the centre in the lumbar portion of the spinal cord, and the hypogastric and spermatic plexus of the sympathetic.

W—, aged thirty-four years, consulted me on March 6th, 1882. "Served in India for eleven and a half years continuously; returned on furlough in August of last year; have enjoyed exceedingly good health while there, though serving in most malarious tracts; have hardly felt the effects of malaria, but had a severe attack of cholera in November, 1877, from which, however, I recovered very rapidly. Habits have always been active; can stand more hard work and exposure than most men; have always been in the habit of taking a tolerable amount of liquor, but never to excess. Early in October, 1881, varicocele began to become troublesome, coming on about an hour after rising, and going off about noon. It was accompanied by the discharge of a few drops of gummy fluid after stools and micturition, generally in the latter case, on the first occasion after rising in the morning. This state of things continued until October 15th, when an emission took place. The varicocele then rapidly diminished, and the discharge from the urethra steadily improved. By the middle of November it had almost disappeared. Early in December it reappeared to a considerable extent without the slightest cause. I placed myself under medical treatment, and was told that my liver was out of order! After a little treatment to set this right a preparation of iron was given. The discharge improved, but erections began to give a good deal of trouble at night, and the varicocele reappeared. An emission took place on Dec. 20th, removing the annoyance from the varicocele, and followed, after a few hours, by the almost total disappearance of the discharge. About Dec. 27th the discharge reappeared gradually; also a little varicocele. The latter was entirely removed by an emission on Jan. 2nd. The discharge now began to show itself, usually a considerable time after micturition—three to five minutes. The discharge continued with slight variation up to about Jan. 17th, when it began to disappear. Varicocele became troublesome again about this time, and continued so regularly until Jan. 29th, when it was removed by an emission. Between Jan. 20th and 22nd the discharge was nothing more than a very irregular trace. On Jan. 28th and 29th it increased a little, but decreased again after an emission on the latter night to some extent. Another emission took place on Feb. 5th, followed by a slight increase. I was rather bilious at this time. I stopped the iron mixture, and by medical advice used medicine containing buchu, which appeared to have an excellent effect on the discharge, but disagreed with me otherwise. On Feb. 20th and the two following days there was a slight increase in the discharge, but it passed off again. From Feb. 23rd to 26th it was still wanting, but the penis was irritable, with a prickly sensation and a great tendency to erection. The irritation continued next day and the following one, on which the discharge reap-

peared at stool. On March 2nd the discharge assumed a yellowish appearance throughout the day and clear after stools. On March 3rd the yellow discharge before mentioned had given place to the usual one afterwards. The excessive tendency to erections at night has continued since about Dec. 15th. I think that the penis is in a state of erection more or less during the whole of my sleep. I have repeatedly to get up and thoroughly wake myself to get rid of it."

Such is the patient's own succinct and intelligent account of his condition. I saw him on March 6th of the present year. I found the left testicle greatly reduced, and the attendant veins large and tortuous. A good deal of genital irritation was complained of, and the urethral discharge was considerable. I had no hesitation in recognising, as cause and effect, the genital irritation, the discharge at stool (prostatorrhoea), and, doubtless, the involuntary emissions during sleep to some extent. It is particularly noteworthy that seminal emission was followed invariably by a diminution of the varicocele and of the urethral discharge; and, under all the circumstances, I felt justified in recommending an operation for the radical cure of the varicocele, administering at the same time the bromides of camphor and iron, which quickly diminished the troublesome genital irritation complained of. As operative interference had been discountenanced by the patient's London attendant, I requested that he should take further advice, and Dr. Alexander Patterson agreeing with me as to the expediency of the contemplated operation, I had recourse to it on March 17th, adopting the method of occluding the veins by subcutaneous wire loop, which I had previously found to answer well in similar cases. After eighteen days the wires were removed, and the veins operated on seemed permanently obliterated. On April 27th the patient wrote: "I begin to notice a considerable general improvement in its (the testicle's) size and consistence. The discharge has entirely ceased." Subsequent communications were correspondingly encouraging, and I had independent testimony to the efficacy of the operation through the courtesy of Mr. Bryant. On September 13th, 1882, the patient writes: "The varicocele gives no trouble even after prolonged exertion, walking or rowing; and my general health has improved greatly. . . . The left testicle has not increased much in size since I last wrote to you, but has grown much firmer. I should say its cubical capacity must be three or four times greater than before the operation. The whole mass, veins and testicle, is about the size of the other testicle now."

CASE 3 differs entirely from the foregoing, the cause being, I believe, injury to the spinal cord at a comparatively remote period. Besides, the discharge from the urethra contained spermatozoa and prostatic tube casts.¹ (Fig. 3.)

J. M—, aged thirty-two, consulted me on Nov. 2nd, 1881. There was no history of masturbation; he very moderately indulged in sexual intercourse. Twelve years ago he had gonorrhoea, which lasted a few months. About this time the patient fell into a ship's hold, alighting on his back on a prominent object, and also upon the occiput. He remained unconscious for about half an hour, and his spine was considerably affected. Subsequent to this period, particularly after lying on his back, on awakening, the patient noticed that his linen bore the marks of seminal emission. Emissions occurred unconsciously to the extent of twice or thrice a week. Simultaneously, and down to the present time, since receipt of the injury, more or less slimy, tenacious matter escaped from the urethra at stool. Six years before this the left testicle was injured by the falling of a box upon it. Inflammation and much swelling ensued, which, however, ultimately entirely disappeared. The slightest excitement, such as travelling on an omnibus, &c., causes irritation of the injured testicle. The parts are quite normal. No spermatozoa were found in the specimen of slimy matter passed from the urethra on first examination; but on Feb. 2nd abundant spermatozoa were found, as represented in Figs. 2 and 3 subjoined. On passing an instrument marked tenderness was found to exist in the prostatic region. To have bromide of potassium, combined with tincture of belladonna and buchu. This medicine very much moderated the seminal emissions. A large instrument was passed twice weekly.

April 17th, 1882: Still some discharge from the urethra at stool, but containing few spermatozoa. More or less swell-

¹ Compare with Mr. Solly's case of Spermatorrhoea from Spinal Injury, page 101, "On the Functional Diseases of the Urinary and Reproductive Organs." (Black.)