ORIGINAL COMMUNICATIONS.

CLINICAL LECTURES ON SURGERY NOW IN
COURSE OF DELIVERY AT QUEEN'S
COLLEGE, BIRMINGHAM.

By LANGSTON PARKER, Esq., Surgeon to the Queen's Hospital, and Professor of Anatomy in Queen's College, Birmingham.

[Reported by James Jaffray, Esq., and corrected by the Author.]

LECTURE IV.

ON SYPHILITIC DISEASES OF THE CARTILAGES OF THE
LARYNX. ON SECONDARY PHAGEDENA OF THE
FAUCES AND THROAT.

GENTLEMEN,—I intend to draw your attention in this lecture to a case of venereal ulceration of the cartilages of the larynx, which you have lately had an opportunity of observing. I shall first detail to you the history of the case. In the second part of the lecture, I shall give you a general history, I may say, of syphilitic diseases of the larynx, and of those conditions of the throat which immediately precede it, and which may be considered in some measure as causes, or, at any rate, precursory or premonitory symptoms of syphilitic disease of the larynx itself.

The subject of the present case was a man 30 years of age, by trade a cook. He consulted me some three months ago, with phagedenic ulceration of the fauces and pharynx. He was extremely emaciated, and said he had had diseased throat for seven or eight years. He first contracted syphilis eight years ago—that is, eight years before I saw him. I do not know what the primary symptoms were; but it appeared that, six months after their appearance, he had skin disease, which was said to be venereal, and no doubt was. This disappeared; but, soon after that, or about that time, he first began to suffer in the throat. The throat appears to have been better and worse during seven or eight years. When I first saw him, in October or November, he was suffering from phagedenic ulceration of the throat. The whole back of the pharynx was converted into an ulcer, having very much the character of hospital gangrene; and the whole of the soft part of the palate was gone, destroyed by previous ulceration. The voice was very hoarse; sometimes he was unable to speak. The bottom of the ulcer could not be seen. The windpipe was very much enlarged, and exceedingly tender. He was at this time directed to use a small quantity of the vapour of the grey oxide of mercury every morning to the throat, and in the intervals to wash it out with a creasote gargle, consisting of ten minims of creasote to half a pint of water, with an ounce of honey—an application, in many forms of secondary phagedæna, I have found exceedingly useful. He took, in the shape of medicine, iodide of potassium with bark, and an opiate at night. The diet consisted of cocoa, milk, beef-tea, and wine and water. You will recollect what I said in a recent lecture on diet in constitutional syphilis. During the time he was under treatment, he had an attack of hæmorrhage from the throat. This was arrested by pressure on the carotid artery. After a month's treatment, he got better; the ulceration of the throat healed; and he was able to return to his native place. He wrote some weeks afterwards to me, stating that he was worse, and begging that I would take him into the hospital. I did so. He at that time could not speak, and was even more emaciated than before. I have said that he could not speak; and he was irritated by my mistaking his meaning, thinking he said no when he meant yes. I mention this to show the state he was in. Very little was done for him: in fact, very little could be done. I recommended him to smear the surface of the larynx with mercurial ointments, and put on a linseed poultice. He also inhaled the vapour of the tincture of conium; but he was only in the hospital two days when he died. He was found dead. The house-surgeon, Mr. West, saw him at eight o'clock in

the evening; and, about two in the morning, he was discovered dead by the night nurse.

Now, having detailed the history of the case, we come to its pathology. On opening the windpipe, you perceive that the disease is evidently external to it; and that it is not in the mucous membrane of the larynx, but in the cricoid cartilage. Here is a fine preparation of the parts. The larynx, having been opened at the back, shows a small abscess surrounding the cricoid cartilage, which is denuded and partly destroyed by ulceration.

This figure represents the larynx opened from behind. *a a*, in the annexed figure of syphilitic disease of the cricoid cartilage, marks the cartilage, carious and denuded, lying in a cavity, which, when first opened, was filled with purulent matter.

This is a pure venereal disease of the cartilages of the larynx, and resembles the history of syphilis as it often progresses in bones. In them, we find that the periosteum is surrounded by matter placed between it and the bone; and if the nodes are opened, which they ought never to be, you will find analogous appearances to what I have here described as existing in the cricoid cartilages, on the surface of the bone denuded of its periosteum. This was not a disease of the epiglottis, glottis, or of the trachea. Here is the whole of the mucous membrane of it, sound. There was, however, in addition, a considerable amount of oedema on the folds of mucous membrane on the sides of the epiglottis (the aryteno-epiglottidean folds).

I shall now make some practical remarks on venereal diseases of the windpipe generally. And, first, what are the symptoms of syphilitic disease of the windpipe? We have seen that such diseases may exist in two situations, in the cartilages, and in the mucous membrane. The voice becomes hoarse and unpleasant; the breathing more or less difficult, more or less spasmodic; with cough, or rather a hawking up of pus, mixed with blood, and sometime, small

sloughs. In the commencement of the disease in this case, the voice was very much altered; in the later stages, it was altogether destroyed. These are some of the symptoms; but they are not necessarily symptoms of syphilitic disease of the windpipe, but they are very suspicious where they occur immediately after long-standing ulceration of the throat. The patient is also generally much emaciated; and there is also frequently an enlargement of the parts. It is true, in this case the emaciation was extreme, and therefore it would give the appearance of greater enlargement than really existed; but the larynx was quite one-half larger than it ought to have been.

Syphilitic diseases of the windpipe are always preceded by other symptoms of constitutional syphilis. The patient I am speaking of had a primary sore, then skin disease, then throat disease, then phagedenic ulceration of the fauces; then the windpipe was affected. There is, in fact, a connecting link of symptoms all through; and this will generally set you right as to the nature of the disease itself.

There is little to be said as to remedial agents in such advanced stages of disease as that which I have just shown you; but these conditions of the windpipe are immediately preceded, and generally for long periods, by other symptoms of constitutional syphilis which are curable; and these symptoms are seated in the throat, fauces, and pharynx, in the various forms of ulceration. It is easy to conceive, when we reflect upon the continuity of the mucous membrane of the throat and larynx, how very probable it is that ulceration of the throat and palate, continuing year after year, should ultimately, in many cases, extend to the windpipe; and this is actually the case. One of the most troublesome and dangerous forms of throat disease is that with which the patient whose case I have just detailed was affected, viz., secondary ulcerative phagedæna.

There are several modes proposed of arresting this kind of phagedæna; one is by the application of strong acids. Strong nitric acid has been recommended for this purpose. When used, it requires great care in its application. If the ulceration is extensive, it requires still greater care, and should be applied only to a small part of the diseased surface at a time. The fumes should be suffered to escape before the acid is passed into the fauces: carelessness on this point has produced fatal asphyxia. I prefer the hydrochloric acid: it is safer, and certainly more efficacious.

The late Mr. Carmichael, of Dublin, has laid great stress upon the application of acids. The ulceration may be arrested by other means; nevertheless I believe it is perfectly safe to apply acids in small quantities to disease of this kind, using the precaution I have mentioned. Nitrate of silver, again, has been employed in the treatment of such forms of disease. I have never seen any great benefit result from it; but I have seen it beneficial by applying it as a gargle to wash out the fauces, in the proportion of one grain to the ounce of water. It is good applied in that way, and is harmless to the patient; it will not poison him if he swallows any. The remedy which I have seen do more good to phagedæna of the fauces than any other is creasote diluted, and applied as a gargle to the throat. The gargle may be made by having about ten drops in half-a-pint of water; or you may put four or five drops of creasote to an ounce of honey, and apply it to the throat by placing it on the end of a brush. These are both good remedies. There is another, which is perhaps of still more importance as an application to the fauces, that is, the fumes of the grey oxide of mercury: a small quantity daily used in this way is a remedy of great power. Now, we come to another question, and you will remember I am speaking of phagedæna of the fauces, because you find it almost invariably precedes disease of the windpipe; and therefore the treatment of these antecedent symptoms is important, in preventing the spread of the disease to the larynx. Well, the question arises, In what form should mercury be used; or should it be used at all?

Now, a case was admitted recently into the Queen's Hospital, of extensive phagedæna of the fauces. The man appeared in tolerably good health, and he had been treated

with the chlorate of potass and various remedies, without success. He was directed to wash the throat with the creasote lotion; he was placed on good diet, and rubbed in small quantities of the unguentum hydrargyri fortius under the armpits, and the fumes of the grey oxide of mercury were directed into the throat every morning. In about three weeks, the cure was perfect. That was about twelve months ago. I have seen the man since, and he remains very well. With regard to external applications, in the shape of blisters, counterirritants, or similar remedies, they are of little or no benefit. But we come to the consideration of a very important remedy; and that is tracheotomy. Mr. Carmichael proposed it as a mode of curing venereal ulceration of the mucous membrane of the windpipe, on this principle, that the constant current of air kept up the ulceration, and he contended that no remedies had much chance of curing, whilst the ulcerated surface was constantly exposed to a current of air. Therefore he recommended that the windpipe should be opened below the ulceration, a tube put through it, and thus give the ulceration time to heal by diverting the current of air through another channel. But it is necessary, you see, that in this case there must be disease of the mucous membrane, and not of the cartilages.

In such a case as this before us, tracheotomy could hardly be attended with more than a momentary benefit. Mr. Carmichael has related one or two cases of success in opening the windpipe, and he refers to Mr. Porter of Dublin, who wrote an excellent book on the windpipe as corroborative of the benefit of tracheotomy. On referring to Mr. Porter's work, however, you will find that gentleman's opinions are very different indeed; and I quite agree with him in what he says. He says that if you have approaching asphyxia from the situation of the ulcer, you are perfectly warranted in protracting the patient's life by tracheotomy; but, at the same time, he thinks it unwarrantable in the early stages of the disease, where so much may be done by other remedies. Certainly, tracheotomy is not to be thought of under ordinary circumstances, or in the earlier stages of the disease, and is only to be adopted with the view of relieving immediate and distressing symptoms. Moreover, it is, as I have said, only of use where the mucous membrane is affected; and it is of no use where the cartilages only are attacked, except suffocation be threatening.

I have paid some attention to these points; and perhaps have occupied your time in this lecture somewhat too long, by touching on subjects having no direct relation to syphilitic disease of the windpipe itself, but have digressed by noticing other symptoms which I regard as most important in reference to it. You may look, therefore, upon phagedenic ulceration of the fauces as a very important disease, not only in itself, but in its consequences; that is, that the ulceration is likely to extend into the larynx. I have told you also the remedies generally useful, and which I am inclined to recommend from experience in their use and from their known benefit; namely, a weak solution of nitrate of silver, creasote, or hydrochloric acid, with the mercurial fume and baths. Most of you know that I place considerable reliance upon the treatment of syphilis by mercurial vapour; and I shall devote an early lecture to the mode in which the mercurial bath is to be applied in syphilitic skin diseases. I shall mention that class of cases in which it may do good, and in which it is not likely to be beneficial. I know a case in which ulceration of the fauces was removed after the patient was immersed in the bath three times. I have told you that with regard to the phagedæna of the throat, it may be cured. I have no doubt at all about it; but with regard to syphilitic ulcerations of the windpipe, that is a different question. Again, in speaking of the case of syphilis before us, you see the man had primary disease, then skin disease, then throat disease, then disease of the windpipe. It is the treatment of the first attack of syphilis, remember, upon which the protection of the patient in after life depends. As to a patient coming and asking you to cure necrosis of the cartilages of the windpipe, or even had ulceration of its mucous membrane, it is a difficult and uncertain matter. But if

he comes with skin disease, that is another question. It is but rarely that you may not put him again in a good state of health, and prevent the more serious and complicated diseases which sometimes follow. Many persons, I know, have denied the possibility of curing constitutional syphilis at all; some say that it is never eradicated. Now, that it is never eradicated if the patient does not undergo a proper treatment, namely, sweating during and concurrent with the application of internal medicines, I am quite prepared to admit; but that it may be eradicated by the means I propose, I am no less certain.

Birmingham, April 1835.

CASE OF GUN-SHOT WOUND: WITH OBSERVATIONS.

By H. BURFORD NORMAN, F.R.C.S., Surgeon to the North London Eye Infirmary, and the St. Marylebone General Dispensary.

On the 7th of January last, Luigi Buranelli entered the house of two persons with whom he had been previously living, and who passed by the name of Mr. and Mrs. Lambert. He went into their bed-room, where they were both sleeping, provided with two loaded pistols: with one, which he presented close to the back of the head of Mr. Lambert, he shot the unfortunate man dead; the ball having passed through the thick mass of muscles at the back of the neck, and, on reaching the vertebral column, entered the spinal canal, between the first and second vertebra, cut across the spinal cord, and then flattened itself against the neck of the odontoid process.

In the next place, he fired the second pistol at Mrs. Lambert, as she fell in rushing from her bed towards him, to snatch away the weapon, and wounded her in the forearm and neck.

Lastly, he endeavoured to destroy himself by discharging one of the pistols, which he had re-loaded, into his own head; the ball, in this instance, entering the right side of the face, near the angle of the lower jaw, a part of which it fractured, and subsequently, by a course not absolutely known, reaching the orbit of the opposite side, where it was discovered.

One can scarcely conceive a man shooting three balls in a way calculated to produce more destructive effects. Yet of the three, one only has proved fatal. Of the case of that unfortunate man, nothing more need be said. That of the reputed wife having come under my care, and presented much that is interesting, I think it will not be unacceptable to many to see a fuller account of it than has yet been given.

My patient, who was also attended by her ordinary adviser, Mr. Allen, is a tall, stout woman, of dark complexion, and somewhat blunt features, and phlegmatic temperament, between 35 and 40 years, possessed of much courage, a native of St. Helena, and not wholly European (I should imagine from her features). She has lived mostly in England, but has travelled a good deal on the continent. She has always had remarkably good health; she drinks water only, because of her tendency to corpulence. On the day she was shot she was in her usual good health.

She had the following wounds: one across the back of the right forearm, about an inch and a half above the wrist, and the second in the root of the neck of the same side. The first of these had two openings: one on the ulnar border, depressed and blackened, and surrounded with grains of powder blown into the skin: the other on the radial border, irregularly fissured, with everted edges not blackened, and not surrounded with powder marks. The wound did not bleed: no foreign body could be felt in it, nor any uncovered or broken bone. The wound of the neck had the depressed edges and fissure-like form; it penetrated the tendon of the sterno-cleido-mastoid muscle, and could be traced by the probe an inch or so towards the vertebral

column. No foreign body could be felt in it, and it did not bleed. Search was made by manipulating the head and trunk of the patient for the ball, which it was thought might possibly be lodged somewhere near the surface, but it could not be felt anywhere. There was no immediate symptom of danger or severity, but a considerable pain in the lower part of the back. She walked after I first saw her from her bedroom—the back parlour—to the front room, and did not need assistance. She was agitated and alarmed, but maintained a remarkable degree of self-possession, and was wholly free from any tendency to syncope or hysterical excitement, and from overwhelming fear. She had neither cough nor dyspnoea, nor bloody expectoration. Water-dressing was applied to her wounds. She was made comfortable on a temporary bed, and some warm tea and a little wine and water were given her as she became chilly. She soon complained of tightness of her chest, and severe pain under her right breast, shooting to her back, and causing painful breathing.

So soon as order was restored in the house, Mrs. Lambert took a draught containing thirty-five minims of laudanum.

I was called to see her many times during the day, as the pain and difficulty of breathing alarmed her: but finding no fever present, although the pulse was quick, I ordered nothing more than hot cataplasms, and enjoined the greatest quietude.

In the evening (9½ P.M.), the dyspnoea was increased, and she had much pain in the side, and quickness of pulse; her nostrils were much in action as she breathed, and she could not lie down. Complete absence of pyrexia, and of anything like excessive pain or alarming oppression of breathing determined the treatment, viz., that of giving ten minims of tincture of opium in camphor mixture every four hours, and abstaining from blood-letting, or other depressing means. Indeed, a little wine and water was allowed.

Similar treatment was pursued for the next four days, and similar symptoms continued, the pain becoming on the whole less, but not the dyspnoea; she slept much supported by pillows, but could not lie down. The bowels up to this time not having been moved.

January 9th. On the third evening she took a dose of calomel and compound rhubarb pill, and the next morning a draught of infusion of senna and tartrate of potass. These medicines acted freely on the bowels. The pain in the side and back continued, and were at times severe, and the breath was short, quick, and catching. Sinapisms and hot bags of salt applied to the side afforded relief.

January 12th. The chest being examined by percussion and auscultation, on the left side posteriorly resonance was found to be increased, and the breath sound exaggerated greatly; there was a very slight dulness and crepitant rhonchus only at the base; on the right side, complete dulness from the base of the chest to near the spine of the scapula, with crepitant rhonchus, bronchial breathing, and marked bronchophony. Anteriorly, both resonance and breath were healthy. The laudanum was suspended, and the following substituted:—

℞ Spiritus ætheris nitrosi,
Tinctura camphoræ comp., aa ʒss,
Liquoris ammoniæ acetatis, ʒiij,
Mistura camphoræ ʒss M.

Fiat haustus quartis horis sumendus.

Some expectoration of thick mucus commenced this day. Once a little clot of blood was spat. In the evening the breath was very tight, and the mucus somewhat tenacious, and difficult to get up. Half a drachm of ipecacuanha wine was added to each draught.

Day by day expectoration became freer, and after a time profuse; it was never rusty, but always more or less frothy; pain in the side continued, but lessened, and dyspnoea was considerable; but from the first to the last day that I continued to see Mrs. Lambert, she never had a dry skin or tongue. She sat up a little at the end of three weeks. At this time, however, she could not lie fairly down, and she received a considerable shock in having to see and identify