states where vaccination was compulsory, the mortality from small-pox was taking up a small figure compared with France, England, and other countries where it was not; fourthly, the existing system of voluntary vaccination, although progressive, was attended with serious and important imperfections, exceeding irregularity, uncertainty, and inequality, for various reasons. The figures in the above table give abundance of thought for study, especially for those taking part in State medicine. I can throw out one suggestion, viz., the time of vaccination should be increased from three to six months. This would, in fine, remove the popular prejudice of ascribing many ailments of children and many deaths to vaccination, and, in my opinion, would afford better protection against small-pox.

PNEUMONIA COINCIDENT WITH SURGICAL INJURY.¹

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The numerous varieties and modes of onset of acute pneumonia have induced me to offer details of two cases presenting rather peculiar features, inasmuch that, being at first regarded as surgical cases, it was subsequently found that the patients were also suffering from inflammation of the lungs; and the question then naturally arose as to which was the primary affection; whether, in point of fact, the pneumonia followed the injury or preceded it.

Acute diseases frequently attack people who are apparently in robust health; and it has seemed to me that a man, whilst following an outdoor occupation, more particularly during the prevalence of east winds, may be suddenly seized with the initial symptoms of an acute inflammation, and, if he be working at a height above the ground, sudden syncope, causing the person to fall, may lead to more or less serious results.

Traumatic pneumonia, as is well known, is the term applied to that form which is caused by direct injury to the lung, usually from fractured ribs being forced into the lung-substance.

It is well recognised that people may walk about whilst actually suffering from typhoid fever (typhoid ambulans), and many other fevers; but usually these febrile diseases are characterised by an amount of prostration which prevents the patient from assuming or remaining in the upright position, or which, if the attempt be persisted in, may result in fatal syncope.

CASE I.—M. L., labourer, aged 44, was admitted to the hospital on Wednesday, March 29th, 1882. He had fallen from a scaffolding thirty feet high. The wind was blowing at the time very strongly from the east. He complained of great pain in the abdomen. Next day he was delirious, and it was discovered that he had pneumonia. He had no cough. He continued very delirious and prostrate till the morning of Wednesday, April 4th, when he died. On *post mortem* examination, it was found that the right lung was in a complete state of black hepatisation. There were old pleuritic adhesions. There were simple fractures of the third, fourth, fifth, and sixth ribs. The base of the left lung was in a state of red hepatisation. Red frothy mucus exuded on pressure after section. The abdominal cavity was filled with clots of blood. On the upper surface of the right lobe of the liver, near its junction with the left, there was a transverse rupture about an inch in length; on section, communicating with this, there was found a cavity, partly filled with organising clot. The kidneys were healthy.

CASE II.—On Saturday, August 12th, 1882, C. S., aged 49, sailor, a native of Iceland, was admitted to the hospital. That day, on walking from the shore to a ship along a plank, he fell into the water, causing a lacerated wound at the back of the scalp about three inches in length, and penetrating to the bone, in which, however, no fracture could be detected. He was taken on board the ship and kept in his wet clothes some four hours, and afterwards brought to the hospital, where he was found to be in a state of collapse. He was delirious. The hands and feet were cold and blue; the pulse was 72 full; the respiration was rapid. On percussion there was found to be dulness over the lower half of the right lung, and slightly at the base of the left. On auscultation very fine subcrepitant rhonchus was audible over these areas. The tongue was coated with a thick dry fur. Next morning, August 13th, he had abundant rusty sputa; the temperature was 105.3°. On August 14th the temperature was 104.3°. On August 16th he was very delirious. Convulsions came on about 9 A.M., and he died in about an hour. *Post mortem* examination showed that on the surface of the right pleura were a few scattered patches of

lymph. The whole of the lung itself was in a state of hepatisation, becoming grey in patches, the middle lobe being entirely so. The whole of the left lung was also hepatised, with the exception of the apex. The heart was normal and the kidneys healthy.

These two cases illustrate the idea which is contained in the title of the paper, namely, that a man, whilst suffering from the initial symptoms of inflammation of the lung, may sustain surgical injury which, for a time, may divert the attention from what is really a serious affection. The first patient was admitted as a case of fractured ribs, and it was not till the next day that it was distinctly evident that he had pneumonia. The second case, though not so clear in demonstrating this hypothesis, still lends support to it; for the patient, after being immersed in the water, was allowed to remain some hours in his wet clothes. He, a foreigner, had been enduring some hardships previously to this, and, in fact, had been discharged from his employment on account of the irregularity of his life. It is open to question whether the immersion and subsequent lying in his wet clothes did not determine the pneumonia, as it is very clear there was, at the time, a constitutional tendency to it. It is quite possible that, when crossing the plank to the ship, he was in the commencing state of the disease which caused the syncope leading to the injury to his scalp, for, when seen, he was in a state of collapse and delirious; at the same time, all the physical signs of pneumonia were manifest.

It is no uncommon occurrence for an epileptic to attribute his fits to the effects of an injury from falling from a height, whereas, in point of fact, an attack of *petit mal* actually caused the fall.

By early directing the attention to the condition of the chest in cases of sudden injury, it is possible that sometimes benefit may accrue to the patient by judicious treatment founded on the aphorism of *obsta principii*.

SURGICAL MEMORANDA.

LOOSENING OF THE TEETH.

THE disease alluded to by G. C., in his brief note in the JOURNAL of May 17th, 1884, deserves more attention than it has hitherto received from the medical practitioner. The disease—chronic wasting of the alveoli—seems, if not a disease of modern life, to be at least on the increase at the present time. The symptoms commence with inflammation, appearing to affect simultaneously the free edge of the gums and the alveolar periosteum. There is a discharge, usually slight in quantity, of muco-pus from within the border of the gums. The gums and alveoli slowly waste until the teeth are lost; the bone in many cases wasting more rapidly than the gum. The teeth in these cases are commonly of good structure and free from caries. There is, in many cases, deposit of tartar, often in the form of hard black nodules on the denuded surface of the root, and beneath the swollen and loosened margin of the gums. The disease rarely affects one tooth alone, more commonly affecting several at the same time; and subsequently extending to the whole set. The inflammation is usually extremely chronic, with occasional subacute and, in the later stages of the malady, acute exacerbations. The disease, rarely seen earlier than the twenty-fifth year, most commonly shows itself about middle age. It is not known whether this malady be of local or of constitutional origin, and it is not known in which tissue it has locally its starting point. It has been stated, but without any verification of the statement, that the affection is really due to ulceration of the alveoli progressing from their edges to the depths. There is no doubt this disease is often associated with certain cachexiæ. M. Magitot has noted its common appearance in diabetes. I have verified his observation in many cases, but at the same time I have seen more cases in which diabetes was not present. It sometimes is an accompaniment of gout; sometimes of debility and anæmia, and I have never seen a case in which the patient was not in some degree below the standard of health.

I believe that this affection is mostly constitutional in its origin, and is really due to local disorder of nutrition. I have noticed it in many feeble patients just beyond middle age, in whom marked fatty degeneration of the cornea was visible. Extended observations by medical practitioners might lead to an exact knowledge of the value of this affection as a diagnostic sign; at the same time making clear its etiology, and leading to more satisfactory treatment. At present, the treatment is as imperfect as our knowledge of the true nature of the malady. It consists in periodically removing tartar, and in frequently swabbing (say twice a week) the necks of the teeth beneath the loosened and swollen gums with pure carbolic acid; a thin silver probe, having its end bound with a small quantity of cotton-wool, being used to convey the carbolic acid directly to the part, and

¹ Read before the North of England Branch