Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

YORK COUNTY HOSPITAL.

CASE OF CARBUNCULAR INFLAMMATION OF LOWER LIP:
PYÆMIC OR SECONDARY PLEURITIS, ETC.: DEATH.

By W. D. HUSBAND, Esq., Surgeon to the Hospital.

MARY TODD, aged 33, a widow, who described herself to have enjoyed good health, and to be living as a domestic servant with a respectable family, was admitted a patient of the Hospital late on July 18th, 1857.

July 20th. I saw her at the request of Mr. Hanbury, the house-surgeon, for the first time this morning, when I found her condition as follows. There was general tumefaction of the left side of the face, of a dusky red colour, which was firm and unyielding to pressure. The lower lip was enormously swollen, of a dark purplish colour, perforated by several openings, through which disintegrated tissue might be seen; but no purulent discharge had been established. The upper lip was slightly swollen, and two or three dark coloured pustules had formed upon it. The swelling of the face was harder as it approached the lip, and softer in proportion to the distance from it. She described the affection as having commenced four or five days previously, with a small pimple near the margin of the lower lip, which did not at first cause much annoyance. The pulse was quick and feeble; the tongue coated with a thick creamy covering; the countenance anxious; the skin cool and perspiring. The patient complained of severe pain on the right side. There was no dulness on percussion, but the stethoscope furnished evidence of pleuritic inflammation, and of capillary bronchitis.

A free incision was made into the affected lip, to the extent of the disorganised tissue; and a strong nitric acid lotion was ordered to be applied, with a large warm poultice over the lip and face. Cataplasms were ordered to be frequently applied to the side; beef-tea, with wine and brandy, were ordered to be given freely; and the following draught to be administered every three hours

R Ammonia sesquicarbonatis gr. v; aetheris chlorici gtt. x; potassæ chloratis gr. x; liquoris cinchonæ (Battley's) gtt. x; decocti cinchonæ ad ʒj. M.

Vespere. The lip was less swollen and painful; the chest symptoms were much the same.

July 22nd. The patient is evidently weaker; pulse smaller and more frequent. The lip is gradually diminishing in size, and regaining its natural colour; and the face is generally less swollen and softer. There is considerable pain in the right side, but no dulness or true crepitation can be detected in any part of the chest; but a sub-crepitant *râle* can be readily heard over a considerable portion of both lungs. Low muttering delirium is occasionally present. The patient was ordered to have as much support as she could take, and to continue the remedies.

July 23rd. The woman continued to sink during the day. There was no aggravation of the chest symptoms; no great dyspnoea nor cough; and the pleuritic pain did not occasion much annoyance. The condition was that usually seen in the last stage of pyæmia. She was bathed in most profuse perspiration. The conjunctivæ gave evidence of the icteric condition so generally present; and the prostration was extreme. She died about 10 P.M.

POST MORTEM APPEARANCES, twelve hours after death. The pleuræ were coated with recent fibrine, not of a firm con-

sistence, but soft and semi-purulent. The lungs were highly congested, and filled with frothy mucus; but no consolidation of any portion of either lung could be detected. Three or four very small lobular abscesses were found in the right lung. The liver and kidneys were healthy, and no other organ presented any abnormal appearance.

REMARKS. For the last seven or eight years, carbuncular, furuncular, and paronychia affections, have been so common as to have been by some considered as varieties of an epidemic depending on some atmospheric or telluric condition influencing the public health, but not recognisable by the senses, nor indicated by the aids which science lends us for the investigation of meteorological phenomena. But may not a more simple solution of the frequency of these troublesome affections be found in the present low type of disease, as evidencing further a low standard of vitality or power of resistance to external impressions in the animal economy of the "*ἄνθρωπος πῦρ*"? Every form of inflammation is now of an asthenic character; hence the human tissues must have now a lower vitality, and be less able to resist or repair morbid action or the effects of external injuries. Hence change of temperature, or other external causes acting on tissue lowered in vitality, and part of a frame having diminished constitutional power, may produce, according to the modifying circumstances of each case, carbuncle, paronychia, or boil; and the specific poison thus produced, and taken into the *pabulum vitæ*, the blood, may produce more boils, another carbuncle or whitlow on another finger; or even, as in the case just narrated, carbuncular disorganisation of the lip may be followed by secondary pyæmic inflammation of a distant organ, the result of a toxæmic poisoning of the blood acting principally on the capillaries of an emunctory organ.

But, to leave the region of hypothesis, and to descend to plain practical facts, boils, carbuncle, and whitlow, the last often in an almost malignant form, have been prevailing now very extensively for several years. They may be said to be varieties of a common type, modified by individual health or special cause. They attack generally the feeble, and those especially whose health has suffered from other diseases; they are asthenic in their character, and run on rapidly to disorganisation of the affected tissues, unless promptly subdued by appropriate local and constitutional treatment.

The case reported is an interesting illustration of the foregoing observations. A woman apparently in good health, but of course, with her fellows, under the present low state of vitality, has a small pimple on the lip; a morbid poison is thus generated; the surrounding tissue is implicated; a low form of cellular inflammation or disorganisation is set up, until the lower lip is almost entirely involved; the blood next becomes contaminated; and then distant organs, those usually involved in secondary pyæmic complications, evidence the secondary constitutional disease.

Why carbuncle of the lip should be more frequently followed by secondary mischief in the chest, than when it attacks some other locality, it is difficult to explain; but that such is the fact, under certain phases of the carbuncular epidemic, there can be no doubt. In the *Medical Times and Gazette* for Sept. 18th and October 2nd. 1852, Mr. Harvey Ludlow gave an interesting account of several cases which occurred in St. Bartholomew's Hospital, in the years 1851 and 1852, of carbuncle of the lip, and in which cases secondary pyæmic mischief occurred when prompt measures had not been immediately adopted to check the local disorganisation by free incisions and active cauterisation. I was not aware of the cases reported by Mr. Ludlow when I first saw the case under notice; but I considered then that the only chance of preventing the loss of the whole lower lip, and of relieving the constitutional irritation, depended on free incisions into the disorganised tissue; and the subsidence of the local mischief, as a result, was marked and satisfactory; but some days had passed over between the invasion of the disease and my first acquaintance with the case. Already the chest symptoms evidenced the constitu-

tional taint; and the poisoned blood and the congested and inflamed lungs soon hurried the patient to a rapid death.

In Mr. Ludlow's cases, where free early incisions were not made, and only palliative treatment was adopted, the patients all died, the disease running much the same local and constitutional course as in the one now reported. Where free incisions were made early, and strong nitric acid or other powerful escharotics applied, the constitutional complication was averted, and the patients recovered. In all, the feeble condition, as in my case, indicated the use of generous diet and a tonic stimulant treatment. In all low forms of cellulitis, I have found the chlorate of potass, combined with bark and ammonia, to be of essential service; and hence, in carbuncle of the lip, the rational treatment appears to be early free incisions (not caring for small arterial branches, which can be readily tied or compressed), the application of lint dipped in strong nitric acid to the exposed tissue, the free use of strong animal broths, with wine and brandy, and of a combination of chlorate of potass, bark, and ammonia, as prescribed in the case of Mary Todd.

ST. GEORGE'S HOSPITAL.

I. COMPOUND FRACTURE OF THE LOWER JAW: PYÆMIA: PUS IN THE ANTERIOR CHAMBER OF THE EYE.

Under the care of CÆSAR H. HAWKINS, Esq.

EDWARD D., aged 37, a hostler, said to be of temperate habits and good health, was admitted on July 13th, in consequence of an accident which occurred five days before. A horse had kicked him in the mouth, and occasioned a compound fracture of the lower jaw, a little to the right of the symphysis; the mucous membrane of the mouth was torn, and the fracture thus exposed. He was admitted into the house on account of a cough with profuse expectoration.

For the first two or three days no symptoms occurred to call special attention to the case; but on July 15th he had a rigor, and on the following day two other and more severe attacks of shivering. His general condition also became more threatening; there was much prostration, loss of appetite, and want of sleep. The tongue was white and the pulse quick. His cough was still very troublesome. He was ordered ammoniated saline draught, and a diet drink containing chlorate of potash. On July 18th (ten days after the accident), he complained of his sight being dim; and the next day, a small quantity of pus was seen in the anterior chamber of the left eye (which had previously been quite natural). The rigors now became more frequent and severe, and his intellect began to be affected. He remained in a delirious condition at intervals during the 18th; and in the morning of July 19th, was seized with violent convulsions, in which he died. The effusion into the anterior chamber had continued to advance, but not very rapidly.

On *post mortem* examination it was found that there was a considerable quantity of pus in the anterior chamber of the left eye, but no appearance indicating previous inflammation of its structure. Lymph was found in the cavity of the arachnoid, forming a false membrane, very easily separated, in the right middle fossa. There was considerable congestion of the vessels of the scalp and dura mater, causing adhesion of the skullcap on both sides. The cellular tissue of the neck and the anterior mediastinum were loaded with ecchymosis, and the walls of the heart were much infiltrated with blood. There were numerous secondary deposits in both lungs, and recent effusion of lymph into the right pleura. The left was quite free from recent deposit, and its cavity was almost obliterated by old adhesions. The spleen, like the other viscera, was much softened, and putrefaction was advancing rapidly. The liver was healthy; the kidneys were coarse in structure and soft, but not, apparently, more so than the other organs.

REMARKS. This case presents some points of interest. In the first place, it reminds us of the fact, that fractures of the lower jaw, even when no great amount of laceration has been inflicted either on the bone or the soft parts, are not so devoid of danger as we are apt to think them. Indeed, a very large proportion of these fractures are compound, and therefore involve the usual dangers of compound fracture. These dangers are, however, less in proportion to the vascularity of the part; and this is, doubtless, the reason why grave consequences—such as erysipelatous affections, hospital gangrene, and pyæmia

—so much more commonly follow fractures of the lower extremity, and so rarely those of the facial bones. That such consequences, however, do occasionally happen is, doubtless, within the experience of most of our readers. Another and more curious point connected with the case, is the occurrence of hypopyon, as one of the phenomena of secondary infection. There could be little doubt that this was the real cause of the suppuration, as no symptoms or appearances of inflammation were observed, nor had the injury involved the eye or upper part of the face in any manner.

II. DEATH UNDER THE INFLUENCE OF AMYLENE.

We regret to have to record a fatal accident which occurred to a patient of Mr. Cæsar Hawkins at this Hospital from the administration of amylene in a surgical operation. The anæsthetic was administered by Dr. Snow. The operation was a comparatively trifling one, being merely the excision of a small tumour, not much larger than a nut, upon the back. The tumour was of the recurrent nature, and, on examination after a previous operation, had been pronounced epithelial. The patient had been operated on three times before, each time under the influence of chloroform, and no particular ill effects had followed, although he had suffered a good deal the last time from subsequent sickness. He was a man 24 years of age, stout, but of an unhealthy appearance, and was not known to have any visceral disease. On the day of the operation (July 30th) he was placed under the influence of the anæsthetic. This was accomplished without difficulty in two minutes; but when he was turned on his side for the operation, he struggled a good deal, his manner being exactly like that of a man violently intoxicated. When this paroxysm was over, he appeared to become insensible, and the operation was performed. This having been done, the amylene was removed from the mouth, the patient having been in the semi-prone position during the interval. About half a minute after the last inhalation, and eight minutes after the first application, of the drug, it was observed that his pulse had ceased, although some imperfect attempts at breathing were made at intervals afterwards. Dr. Snow immediately commenced artificial respiration, mouth to mouth, and the galvanic apparatus was made ready as soon as possible, the stream being directed to the thorax. Afterwards, the method of artificial respiration recommended by Dr. Marshall Hall was employed sedulously; and these remedies were kept up for an hour and a half. For the first half hour occasional attempts at respiration were noticed, but at long intervals, but no pulse could be felt. As a last resource, two needles were passed into the walls of the heart itself, and the stream of galvanism directed through them. This, however, failed to stimulate the heart; and after some time longer had been spent in fruitless attempts to restore respiration, the case was abandoned.

On *post mortem* examination, the blood was found fluid, free from any odour of amylene; the cavities of the heart were all semi-relaxed, and full of dark blood; its substance was healthy on microscopic examination. The lungs were gorged with blood, which had been extravasated here and there. The brain and spinal cord were healthy. Four small tumours, similar to the original disease, were found scattered through the left lung. The needles had entered the wall of the right ventricle, but had not penetrated into its cavity. A large cyst was found in one of the kidneys.

REMARKS. Little comment is needed on the foregoing case. It merely shows that amylene is not safer as an anæsthetic than chloroform. It is the second fatal case which has been reported. The other was reported by Dr. Snow in the *Medical Times and Gazette* a few months ago. In both, the patients were young men in apparently good health, and no visceral disease existed which could account for the fatal result. In the present case an opinion was expressed, from cursory survey of the heart, that it was affected with fatty degeneration. This, however, was not confirmed by microscopical observation, and was, indeed, in all probability, merely a deduction from the appearances of commencing putrefaction; nor, if that state of the heart had been present, could any great weight have been attached to the circumstance; considering that in deaths from other anæsthetics the majority of the patients have not presented this condition; and also that some amount of fatty degeneration must be present in a large majority of the cases in which chloroform or amylene is administered with safety to persons advanced in life.