

most orthodox believer in the specific action of mercury in the *secondary*, and of iodide of potash in the *tertiary*, stages of constitutional syphilis could hardly object to my employing both these drugs together in a case in which it was so exceedingly doubtful whether the manifestation belonged to either of the stages or to both intermingled. Nor did, considering the gravity of the dyspnoea, this case seem to me to offer the proper opportunity for experimenting first with the one and then with the other. I thus certainly lost an, at the best doubtful, chance of making conclusions as to the nature of the tumours and to the stage of the disease, but I possibly saved by that very combination my patient from tracheotomy. However, I should not like to let this argument produce the impression that only my diagnostical doubts had prompted my therapeutical action. I wish, on the contrary, distinctly to state that, although as a rule I use only iodide of potassium in cases of tertiary syphilis of the respiratory air passages, and although my results are satisfactory enough, I am accustomed, *in cases of extreme urgency, to combine* both iodide and mercury in the manner described above, with the belief that, far from interfering with each other, their combined action assists greatly in the *more speedy* solution of the products of the tertiary stage. With this object I have in this manner treated several urgent cases; in all of them I have achieved the desired object, and in none of them have any bad sequelæ resulted; a sufficient reason for recommending a similar course of treatment in cases similar to the one just reported.

(To be continued.)

## PULMONARY ABSCESS OPENED ANTISEPTICALLY; DEATH.

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THE following case, being interesting in several points, which I will mention afterwards, has led me to publish it.

S. A—, aged twenty-three, married, a carter, was admitted on June 22nd, 1881, under Mr. Hamilton's care, with well-marked signs of pleuritic effusion on the left side. He was apparently healthy, stout and free from any constitutional taint. His family history was good, and he never had had a day's illness in his life. The present ailment commenced in the previous February with chills, pains in the left side, and feverishness; the result of getting wet through. The medical man who attended him said he had pleurisy; gave medicine and blistered the side; the patient was by these means relieved and continued in his employment until April, when he experienced difficulty in breathing, shortness of breath, and slight cough; he said he had spat blood once or twice. These symptoms becoming worse, and feeling unable any longer to follow his work, he was admitted on June 22nd with signs of effusion into the left pleura. The side was painted with tincture of iodine, and iodide of potassium with cod-liver oil administered internally. This treatment was continued until August 20th without any improvement, when the following signs were noted: The patient has lost flesh since his admission; the left side of the chest bulges more than the right, and measures an inch more round; movements on this side are deficient; there is absolute dulness on percussion, both back and front; no breath-sounds are heard, and the vocal fremitus and resonance are absent. The breathing on the right side is exaggerated. The cardiac dulness is continuous with that of the rest of the side; no apex beat can be seen or felt, and there is no displacement. Upon auscultation aortic (systolic and diastolic) murmurs are heard, and the pulse is of the "waterhammer" character. He has a slight cough, but no expectoration of any importance. Has night-sweats; the temperature every evening has been above 100°; and the pulse invariably above 100.

From these symptoms an empyema was suspected, and an exploratory puncture, made in the sixth intercostal space in the axillary region, discovered pus. Accordingly, upon August 23rd, an incision, about two inches long, was made, just above and parallel to the seventh rib in the anterior axillary line, antiseptically and under chloroform. Upon opening the pleura, there was very profuse hæmorrhage of

dark venous blood, which could only be arrested by the injection of a solution of the perchloride of iron. About fifteen ounces of pus escaped. Passing the finger through the wound into the cavity, there appeared to be a number of adhesions, some of which were broken down with the finger. A drainage-tube was inserted. The dulness disappeared after the operation; the same side became hyper-resonant; the patient felt very much easier, and could lie on the right side for the first time since the illness. There was a very profuse discharge, which in a few days became fetid, necessitating the wound to be dressed three or four times daily; and the antiseptics were discontinued. The temperature became lower, 99·4°; but the pulse remained as before, as did also the cardiac murmurs. He had less pain, felt better, but had now a very troublesome, irritable cough, with much frothy, muco-purulent, and bloody expectoration.

He continued fairly well until the 29th, when the temperature suddenly rose to 103·4°; he had great pain in the chest (requiring morphia injections); the voice became very weak; he perspired freely, lost his appetite, and gradually sank, dying on the morning of the 30th.

The necropsy, made the next day, showed the whole of both surfaces of the left pleura adherent, without a drop of fluid in the sac. The external opening made in the chest-wall led into a large, irregular cavity, situated in the centre of the lung, which was in a state of grey hepatisation. The opposite lung was healthy, but congested. The heart was small and flabby, and the valves healthy. Other organs normal.

*Remarks.*—This was evidently a case of chronic pneumonia, ending in the formation of an abscess. It is interesting on account of its rarity and the difficulty of diagnosis. With regard to the rarity of purely inflammatory (i.e., non-tuberculous, non-metastatic) abscesses in the lungs, Trousseau says for the first twenty-five years, as a hospital physician, he had never met with a case; and that Laennec had only seen five cases in opening the bodies of several hundred persons who had died of pneumonia. "Moreover, they were inconsiderable, few in number, and scattered throughout the lungs, which presented the third degree of inflammation." Dr. Walshe, in his *Treatise*, speaks only of pulmonary abscess the result of acute pneumonia; and in looking through some journals, I have been unable to meet with the mention of any case.

The second point of interest is the difficulty in the diagnosis. Taking the lad's condition in August (bulging of the left side of the chest, absolute dulness, no breath-sounds, no vocal fremitus or resonance, a continually high temperature, with night-sweats and loss of flesh), together with the previous diagnosis made in February, one would naturally look upon it as a case of empyema, especially after puncturing and drawing off pus. The disease being unilateral, with no signs of tubercle in the opposite lung, it would be taken also as an idiopathic, and not a diathetic pleuritis. Then, again, absence of breath-sounds and of vocal resonance, with increased measurement of the side, also pointed to fluid in the pleura. There was no cough, no rusty-coloured expectoration, no increased vocal fremitus or resonance, which would indicate pneumonia; in fact, there was everything in favour of an empyema, and hence the treatment adopted. A post-mortem could only reveal the true state of affairs, and at the same time explain all the previous signs and symptoms. Why were there no breath-sounds to be heard? Because the whole of the air-vesicles and bronchial tubes were filled with exudation matter; and for the same reason he never had purulent expectoration, there being no direct communication between the abscess cavity and the bronchus. \*

The question might be asked whether, if the case had been left to itself, would the abscess have ever opened and discharged itself into the bronchus, and so the pus be expectorated, or would it ever have burst externally? It could not have opened into the pleural sac, because that was closed by previous inflammation. The symptoms that were present after the operation are also explained; the irritable cough and profuse purulent expectoration mixed with blood were due to the finger breaking down the lung-tissue, which was at that time supposed to be adhesions; the hyper-resonance was owing to the cavity being now filled with air. But one thing remains unexplained—that is, how were the aortic murmurs produced when the valves were healthy? I cannot surmise any other agency than that of pressure.

In conclusion, it may be asked, if we could have formed a correct diagnosis would it have been better to have left the

case as it was, to take its own course, or to do what was done? As things did turn out it would have been certainly better to have left the case alone; but we did the best we could under the circumstances, and if another case, with the same symptoms and signs, ever should occur the same treatment could only be adopted.

## THE TREATMENT OF HÆMORRHOIDS BY "CRUSHING."

By R. FITZROY BENHAM, M.R.C.S. ENG., &c.

SINCE the introduction of my clamp for the treatment of hæmorrhoids by crushing, as described by Mr. Pollock in the number of this journal of July 3rd, 1880, I have had considerable practical experience in this mode of treatment, and propose to review the etiology of the crushing process for the benefit of those who may not be acquainted with the superiority of this method of operating over all others.

Mr. Pollock, some two or three years prior to the communication to which I have just referred, put his views in practice with the object of avoiding the then existing "mode of treatment by clamp, scissors, and actual cautery, which, though perhaps somewhat less painful than by ligature, was still sufficiently severe to occasion much subsequent suffering; and lasting for some days." Besides, the application of the heated iron to the surface of a fresh wound must not only make it a very painful one, but burning the surface necessarily converts it into a more extensive slough, which has to be thrown off before healing commences. It occurred to him "that any thorough and instantaneous destruction of a part is usually comparatively painless in the injury itself and its sequence. A heavy weight falling on a finger or toe, and completely crushing the part, is seldom attended by much pain then or subsequently; nor under such circumstances does much bleeding occur. A man hit by a bullet in soft tissues is known to be ignorant of the receipt of the injury until the trickle of the blood is observed in the neighbourhood of the wound, and thus it occurred to him that if a pile could be rapidly and effectually destroyed at its base by some instrument which in its action would be analogous to that of crushing the part included in its bite, the vessels of the crushed portion would not be very likely to bleed when the surface of the pile was removed, and the nerves being bruised by this proceeding would be less liable to be followed by pain."

Several instruments were designed by others to carry out Mr. Pollock's theory, but he considered that they all failed, namely, in not having sufficient crushing power. These clamps, without exception, were made to apply in a line with, or a parallel direction to, the buttocks. Now it occurred to me that if the pile were to be grasped in the opposite direction, the jaws of the instrument could be so constructed as to be parallel to each other, and on this principle effectual clamps could be made after various designs; but I felt that in order to obtain a clamp of the simplest and yet most powerful description, it would be advisable to construct it in the shape of pincers with handles about four times the length of the other extremity, with the addition of a screw, to be attached to the extremities of the handles. I also thought that instead of the opposite (or opposing) surfaces of the jaws being made square, they should be inclined at an angle of 45°; for this would not only augment the crushing power, but would create a "grinding" movement.<sup>1</sup> A few instruments having been made on this principle, I soon discovered that, although the power which could be brought to bear was almost unlimited, yet for want of an accurate and uniform temperature of metal—namely, a "plum colour," the opposing surfaces of the jaws were apt to become displaced; hence I varied the inclination of the surfaces of the jaws by having them made square, and the crushing area increased, not by thickening the depths, but by introducing a V-shaped piece between them.

I now propose to describe the method of operation adopted by me, and which, I may add, has invariably been crowned with marked success. Prior to the operation, the patient's general health should be thoroughly scrutinised. The

bowels should be well opened by the aid of some purgative—perhaps the simplest is either Glauber's salts or the compound senna mixture—and, in addition to this, it is usually advisable to give a common enema just prior to the time fixed for the operation, and to steam the parts in the usual manner. The patient having been placed under the influence of ether, should be turned on one side, usually the left, with the buttocks well drawn to the edge of the bed, and with the knee remote from the bed, well drawn up towards the abdomen. The pile to be removed is to be drawn down by means of a pronged fork or vulsellum. The clamp is then to be applied to the base of the pile, and at once tightly and firmly closed by the action of the screw at the end of the handles. The portion of the pile which protrudes inside the lips of the clamp is then to be removed by a pair of scissors curved on the flat or scalpel. After the clamp has been allowed to remain *in situ* for about a minute, the thumbscrew may be gradually slackened; but, at the same time, particular care must be taken to press the jaws of the instrument well up against the buttocks, so that the surrounding tissues may not be unduly stretched, otherwise they will return into the bowel with an "elastic recoil," and will thus have a tendency to tear asunder the "fringed remnant" left by the clamp. I cannot too strongly impress this on the attention of the operator; for the success of the operation being rendered bloodless depends in no small measure on his taking this precaution. The process is, of course, to be repeated according to the number of masses to be got rid of. If several piles are to be removed it is advisable to operate first on the lower, or those situated more externally, and then to proceed upwards; for by adopting this method the "fringed remnants" left by the clamp from the former masses will not be subjected to so much tension when the latter are operated on. If a pile be of an unusually large size, so much so that it is apprehended that a portion may overhang the sides of the jaws, I clamp the mass in two portions; but before releasing the grip of the jaws from the first portion I divide only a part of it which is within the grip of the jaws, and then take particular care to have a firm hold with the vulsellum of the portion not yet operated on.<sup>2</sup> Occasionally it may be advisable to separate the skin before clamping the pile; but, as a rule, I have not found this at all necessary, or even beneficial, for this reason alone—the area of the wound to be healed is materially increased. After the operation I simply sponge the parts, and usually administer an anodyne, not so much for the purpose of alleviating pain, but chiefly to quiet the patient, as he naturally becomes restless for a few hours afterwards, until the effects of the ether pass off. It is as well that the bowels should not act for about five or six days after the operation, but should they be relaxed I administer opium, either the tincture or a suppository, which I also do in those exceptional cases in which patients are peculiarly sensitive to even the slightest pain. On the morning of the sixth day I usually give about three drachms of Glauber's salts in warm water, and if this does not readily act, which may cause the patient some discomfort, I then administer an enema. By this means the motions become loose, thus reducing the pain arising from the hardened fæces passing along the tender parts to a minimum. After the bowels have acted, the parts are to be carefully sponged and smeared over with carbolised vaseline (five grains to the ounce), by gently introducing the finger into the bowel. The diet should at first be light and nourishing, but not stimulating, unless otherwise indicated. It is rarely necessary for the patient to remain in bed after six or seven days, if the bowels have acted, but it is not advisable to allow him to resume any active work for at least a fortnight after the operation, and, indeed, even for a few days longer, if he be a labouring man.

Having now had exceptional facilities for observing a very large number of patients, besides perusing the notes of innumerable cases extending over very many years, I really cannot speak in too glowing terms with regard to the pain and early convalescence of patients operated on with my clamp, and subjected to the above treatment, as compared with all other methods of operating. In a word, I may say that the difference as regards these respects is truly astounding, so much so that I venture to think that no surgeon acquainted with the fact would wish to submit his patients to any of the what I may now call old methods of treatment.

<sup>1</sup> See my description on the construction and mechanical advantages of the clamp quoted by Mr. Pollock in THE LANCET, July 3rd, 1880.

<sup>2</sup> I have recently introduced a modified clamp, so that on each side of the jaws there is a projecting lip or beard; hence it is impossible for the sides of a large mass of tissues to overhang the jaws.