abscess or gangrenous cavity there is little room for hesitation. But it may be asked, is operation to be commended in the class of cases which I have described? To this I would say that in chronic cases in which no substantial benefit accrues from ordinary methods of treatment, where the copious expectoration must act as a constant drain, and is so insufferably fetid as to poison the patient himself and all around him, I think the operation is justifiable. But when, in addition, there are signs of involvement of the previously sound lung, and the not inconsiderable risk of death from abscess of the brain is kept in view, it becomes a question whether the operation is not only justifiable but necessary. In any case there has always been marked alleviation of some of the most distressing symptoms.

As it happened in my case, although there was nothing in the history of the illness to lead to a suspicion of the presence of a foreign body in the bronchus, the fact that a foreign body was there would have greatly diminished the chances of a favourable result, unless in the event of its finding its way out by the external wound.

I may say as regards etiology, that two other of the twenty-two cases of bronchiectasis I have referred to were due to a similar cause; in one a piece of straw was found, and in the other a tooth which had eluded the dentist in the act of extraction.

As to the surgical method in such cases there is no need to say anything. Nothing can be added to what has been said by Mr. Godlee on the subject in his Brompton Lectures (*Lancet*, vol. i, 1887). It has been recommended that care should be taken, before operating, that the pleural layers are adherent. I think, however, that it will be generally admitted that, however probable the adhesion may be in some cases, its certainty can never be assumed until the incision has been made. In the present case the pleura was adherent, but only to the extent of half the length of the wound. If we had only been fortunate enough to have had the opening made half an inch or so nearer the spine, a completely adherent part would have been incised.

To remedy, so far as possible, the lack of adhesions, the lung was stitched to the chest-wall, but this did not suffice to prevent septic material from getting into the non-adherent part of the pleura and setting up a limited empyema.

THE TREATMENT OF RECENT PLEURITIC EFFUSION BY THE ADMINISTRATION OF SALINE CATHARTICS.

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THOSE whose general practice it is to treat cases of considerable pleuritic effusion by tapping the pleural cavity must confess that, not infrequently, the fluid reaccumulates, and that it occasionally becomes purulent. Recognising the truth of this clinical observation, I have for some time past discarded operative interference in such cases, relying, for the relief of the effusion, upon the effects produced by saline cathartics, administered in a manner which I shall indicate presently. The exact physiological action of this class of drugs is beyond the scope of the present paper. Suffice it to say that, primarily, they induce watery evacuations from the bowels, with the necessary result that the blood becomes inspissated and absorption stimulated, and hence their well-known utility in the removal of dropsical conditions. Bearing in mind this fact in therapeutics; recollecting, too, that serous exudations have been known to disappear during an attack of cholera (when the blood is to a great extent deprived of its watery element), and that the simple withdrawal of fluids from the diet has been advocated as curative of pleuritic effusion, it seemed reasonable to suppose that if a patient, the subject of this complaint, were starved of fluids and purged by salines, the resulting concentration of the blood would be remedied at the expense of the effusion. In this expectation I was not disappointed, as will be seen from the notes of the following cases treated in accordance with the theory set forth above.

The first case was that of a spare-looking man, aged 28, who was admitted into the Aberdeen Royal Infirmary on January 26th, 1887, suffering from acute pleurisy, with extensive effusion on the left side. The chest gave a dull percussion note up to the second rib, and the heart was beating away to the right of the sternum. The temperature was 101°. For five days after admis-

sion, he was treated by the administration of alkaline diuretics, along with the application of counter-irritants. At the end of that time, however, as there was not the slightest improvement in his condition. I determined to try the effect of saline cathartics. Accordingly, on February 1st, I ordered him to have, twice a day, two drachms of magnesium sulphate, dissolved in as small a quantity of hot water as possible, and directed that he be almost starved of fluids, taking care on this head to explain to the patient the object of this (to him) somewhat extraordinary procedure. In passing, I may mention that magnesium sulphate was the saline chosen, partly from its effective cathartic properties, and partly from its great solubility, for it is dissolved in less than its own weight of hot water. The effect of the treatment was soon apparent, and, without going into the gradual changes that took place in the physical signs, it will be sufficient to state that in eleven days all evidences of effusion had disappeared, and that the heart was restored to its normal position. As was to be expected, the secretion of urine underwent marked diminution during the time the patient was under the cathartic treatment, and it is interesting to note that the amount became more than physiological soon after the drug was discontinued.

The next case was that of a robust-looking fisherman aged 28, who was admitted to the Infirmary on May 19th, 1888, complaining merely of debility. On physical examination of the chest, however, there were signs of great pleuritic effusion on the left side. Skodaic resonance was unusually distinct, and the heart was seen pulsating in the right third interspace. There was no increase of temperature. Without spending time in any preliminary treatment, the patient was ordered on May 22nd to have twice a day half an ounce of magnesium sulphate dissolved in the minimum quantity of water necessary for solution, and, as in the previous case, the ingestion of fluids was restricted. Free purgation rapidly ensued, and on May 24th cardiac pulsation was faintly visible in the left fourth interspace close to the sternal edge, but it was still to be seen, though less distinctly than upon admission, to the right of the sternum. Skodaic resonance was now greatly diminished, and the other signs of effusion were much less evident.

On May 29th it was noted that the apex of the heart was beating vigorously in the left fourth interspace midway between the nipple and the sternum (apparently the normal situation in this patient, for there it subsequently remained); skodaic resonance could no longer be elicited; all signs of effusion had disappeared, and loud pleural friction was audible at the extreme base of the lung posteriorly. Within a week from this date the last traces of friction vanished, and the patient was discharged.

In bringing before the profession the treatment of pleuritic effusion by the administration of saline cathartics, as illustrated by the foregoing cases, I trust that I will not be understood as recommending its indiscriminate adoption. Patients of poor physique or in whom a phthisical tendency exists are obviously ill suited for this plan of treatment, and I need hardly mention that when dyspnoea is an urgent symptom, especially when accompanied by signs of collateral hyperæmia or œdema, the use of the trocar gives more speedy relief than that afforded by free purging. Still, one meets with many cases where the effusion is large and of recent occurrence, where dyspnoea is not pronounced, and where signs of physical and constitutional debility are absent, and these are the cases which seem to me to be peculiarly adapted for treatment by the method which is the subject of this paper.

SUPPURATING HYDATIDS OF LIVER: INCISION AND DRAINAGE: RECOVERY.

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THE following case, I think, presents some features of interest at the present time, when the surgery of the liver is attracting considerable attention.

W. P., a young man, aged 18, a grocer, resident in the Isle of Man, began to be unwell about the end of March, complaining of shivering, sickness, feverishness, with pain in the right side; no cough, but considerable dyspnoea. He was seen by a medical man and pronounced to be suffering from indigestion and bilious-