Sometimes the fluid becomes thick and infected. It is then necessary to wash the pleura out. This is done with Iodine solution once or twice a week. The technique is simple.

Two needles are used and the fluid is run into the pleural cavity at a temperature of about 100 deg. F. through the upper or higher needle and then aspirated. This is done three or four times until the fluid comes away clear. It is remarkable how cases will clear and temperatures fall with this treatment.

If fluid is left in the pleural cavity the space will gradually obliterate from below upwards and a mass of fibrous tissue will cause contraction of the thorax on that side.

Now it is found that a Pneumothorax cannot be done on every unilateral case because, as you know, pleurisy is a very common condition in Pulmonary Tuberculosis and it leads to the formation of adhesions between the two layers of the pleura. These adhesions cause obliteration of the space and so air cannot be introduced. Often the pleurisy is very localised and then only a small area will be adherent. Then on the introduction of air, as the lung is attached to the thoracic wall in certain places, we obtain only a partial collapse which is not very satisfactory.

This difficulty can be overcome to a great extent by cutting the adhesions. The operation requires rather elaborate apparatus but is not very difficult.

The chest wall is anæsthetised in the usual way and a thoracoscope introduced. This instrument gives a view of the inside of the pleural cavity. The adhesions can be seen and injected with local anæsthetic. They can then be severed by galvano cautery or Diathermy and so allow the lung to collapse.

There are dangers if care is not exercised. A broad adhesion may contain lung tissue and when cut infect the pleural cavity, and a pyo pneumothorax result. Hæmorrhage may occur whilst the adhesion is being cut but this can be controlled now that diathermy is used.

Some cases develop a temperature after the operation, and the majority form some fluid but this is not of much importance. The operation is an extremely valuable one in effecting a good collapse when otherwise it would be impossible.

You will see that A. P. treatment means continuing refilling until the pleural cavity begins to obliterate. This may not occur for many years. It has therefore been tried to substitute air by oil, and so produce an oleothorax.

The paraffin and 10 *per cent. Gomonol* oil is introduced by a large syringe. It tends to prevent obliteration and also reduces the necessity for refills and so is useful for cases going on long journeys. Beyond that I do not think it has anything to recommend it.

I said a little while ago that certain cases have so many adhesions that although suitable in all other ways cannot be treated by A. P. treatment.

In these cases a form of plastic operation has to be considered. The most usual operation is a Thorocoplasty. The operation is a major one and must not be decided upon without careful consideration. It is highly important that the case is unilateral as the diseased lung is permanently collapsed, and the patient has to rely on one lung for the rest of his life.

The operation may be done in one or two stages but the ultimate result is the same. A general anæsthetic is given, preferably gas and oxygen with a very little ether.

The ribs are exposed by a long incision from the apex of the lung, along the para vertibral space to the base of the lung, pieces of each rib are resected, varying from six to eight inches in the lower ribs, to one inch to two inches ribs in the upper, the proximal resection being as near the vertebral column as possible.

This means that a large portion of the bony casing and support of the thorax has been removed on the one side. It is therefore possible to cause the chest wall to collapse.

The wound is closed, and tight bandages compress the side so that the lung is immobilised and compressed. To avoid shock saline is generally given during the operation, and if diathermy is used there is a much less loss of blood.

As an adjunct to the operation, phrenic evulsion is often done previously to further assist in keeping the lung at rest.

As technique improves the shock from the operation is becoming less, and the mortality at present is low. The results in properly selected cases are good and although the treatment is drastic it has a definite and important place in our attack on the disease.

When the patient has recovered from the operation it is necessary to supply him with a splint to assist in compressing the lung. There are a number on the market but they all consist of a pressure pad which is held in place by straps to collars fixed to the opposite shoulder and hip.

Similar splints are sometimes used to compress, and attempt to immobilise a lung when other methods are not applicable. They do help the lung to contract if worn continuously over a long period. Weighted shot bags and strapping can be used to advantage, particularly in cases with apical cavities from which there has been some hæmorrhage.

All the above methods have one common object, namely: to immobilise the diseased lung so that by rest the body can overcome the infection and heal the damaged tissues.

WHAT OUR FELLOWS ARE DOING.

The Film in Nursing Education.

(*Contributed by* MISS E. M. FOULKES PRITCHARD, S.R.N., F.B.C.N., *Sister-Tutor to the Suburban Hospitals, Cape Town,* to the *South African Nursing Record*).

Many teachers in the nursing world to-day find themselves handicapped through lack of means to demonstrate the many subjects they are called upon to teach. Especially does this apply to such subjects as Anatomy and Physiology in schools where Laboratories and Dissecting Rooms are not to hand for nurses' use. It may therefore interest these same teachers to hear of a scheme I have started in my hospitals to overcome these difficulties.

Through the assistance and co-operation of the Medical and Nursing Staffs and also of Messrs. Kodak's, I have been able to arrange a series of Medical Film Displays which show promise of being invaluable in the teaching of the student nurse.

The films are beautifully produced and position and function clearly depicted. After our first display the voting as to their educational value was unanimous, and I am hoping to establish this method of instruction as a permanent thing.

The cost of such a method, I know, must not and cannot be overlooked. Kodascopes cost money, and Film Libraries are more expensive than Book Libraries, but they are not entirely beyond our reach, and the results are undoubtedly worth while; and it should be realised that the more widely this method is used the more rapidly will the cost come down and so bring the method within the reach of schools less able to cope with present prices.

I am sure if other teachers in the same position as myself will make an effort to show that this method of instruction is worth while, we could very soon bring it within the reach of all Training Schools, and by so doing save much weary grinding on the part of nurses who have all too little time to adequately cope with such extensive subjects without adequate demonstration.

I should make it clear that these films are not confined to the two subjects I have mentioned, but include many diseases, surgical conditions, operations, etc., which are likewise invaluable.

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