the diseased area. Next morning, however, the breathing was bronchial in character, but reverted again later in the day to its previous inaudibility. Occlusion and patency of the bronchus alternated during the next fortnight, at the end of which radiological examination showed almost complete resolution.

The occurrence of lobar pneumonia not with the signs of fluid but with complete absence of abnormal physical signs is less frequent but even more interesting.

A third case of unmistakable pneumonia showed no abnormal physical signs whatever until a few redux crepitations appeared during resolution, and the diagnosis might have remained a little uncertain had not a radiograph shown consolidation of the centre of the middle lobe with a cortex of healthy lung tissue shallow enough in itself but sufficient to obscure the condition of the underlying lung ("the central pneumonia" of the textbooks).

The physical signs of pneumonia with and without bronchial occlusion are closely parallel to those of massive or absorption collapse with patent bronchus and with closed bronchus, the main point of difference being the position of the heart. In pneumonia the apex beat is not as a rule displaced, whereas in collapse there is a homolateral shift which may not, however, in well-compensated cases, be sufficient to be clinically evident. Massive collapse may itself be further complicated by the development of pneumonia in the affected lung tissue, in which case differential diagnosis is largely dependent on x-ray examination and the temperature chart.

While it is readily admitted that a large pleural effusion would cause such contralateral cardiac displacement as would dispel any difficulty in distinguishing it from one of the pneumonias above described, the small effusion conforming to the size of a lower lobe is a very different matter, the cardiac shift being sometimes so slight as to be undetectable without a radiograph, and the physical signs identical with those of pneumonia with a blocked bronchus. We have hesitated to explore these cases for fluid for fear of infecting a healthy pleura through the needle track, but it is possible that this risk has been exaggerated. Bullowa (1937) records over two thousand diagnostic lung punctures in pneumonia without serious complication.

Should a lobar pneumonia presenting these signs (dullness to percussion and absent breath sounds) show a persistently raised temperature or secondary elevation, there arises the problem of differentiating pleural and pulmonary sepsis, empyema, and abscess, or spread of the pneumonia. The clinical findings are so equivocal that only after an x-ray film has been taken is it justifiable to explore. Our second patient, after an apyrexial period from the fourth to the eighth day, developed a temperature of 100°. Radiological examination showed no evidence of fluid, and the temperature gradually returned to normal during the ensuing week, so that it was unnecessary further to watch for the development of an empyema. It is possible that retention of sputum was responsible for the secondary fever.

We have described these abnormalities in the hope that the physical diagnosis of pneumonia may become established on a broader basis, as we believe that atypical forms are seen more often than is generally admitted, as witness the fact that these three cases were seen in succession.

We are indebted to Dr. R. A. Young, Dr. J. L. Livingstone, and Mr. J. C. Hogg, of the Brompton staff, for their kind permission to make use of the cases.

REFERENCE

J. G. M. Bullowa. *The Management of the Pneumonias*. London, 1937.

THE POSITION OF THE PATIENT IN GASTROSCOPY

AN OPERATION TABLE ATTACHMENT

BY

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During any instrumental investigation the comfort and sense of security of the patient are essential to the satisfactory performance of the examination. This is a matter of particular importance in gastroscopy, both with regard to the immediate result and to the possibility of a further examination. If these points receive care and attention at the patient's first investigation he will have little reluctance to submit himself again to the procedure should it be necessary. I have examined a number of patients who have willingly come to hospital to be gastroscoped four and five times without fear of anything more than a little discomfort.

The Patient's Position during Examination

The details of the technique of gastroscopy have been described elsewhere (*British Journal of Surgery*, January, 1937), but it may perhaps be useful to consider the question from the patient's point of view with regard to his position during the examination. Although I have on occasion found the sitting position of the patient a great advantage in viewing a difficult gastro-enterostomy opening, the left lateral position is unquestionably the most satisfactory one for almost all cases of gastroscopy. In this position the stomach is not elongated by gravity; the pylorus tends to fall towards and the greater curve away from the objective, so that each can be seen to the best advantage and properly illuminated. For the optimum ease of instrumentation, however, the patient must lie with as complete relaxation of the muscles as possible, and to obtain this he must have complete confidence that he cannot slip or alter his position during the examination, particularly when the table is tilted. Fixed, rigid, but well-padded supports are both more efficient and give more confidence to the patient than the grip of an assistant, and with this object in view I have designed an attachment to an operating table to adapt it for gastroscopy.

With regard to the desirability of tilting the patient during the examination I have experimented for over two years with a special table which allowed tipping in all directions—longitudinally or sideways, either singly or in combination. I have found that whereas tilting the patient head down has often been useful in shifting a collection of bubbles or in opening out an exaggerated gastric angle to allow the pylorus to be seen, in no case has the sideways tilting enabled a difficulty to be overcome or brought into view a part of the stomach that could not be seen.

In accordance with this experience, the attachment described below consists of a portable folding table top, which, when strapped to an operating table with provision for the Trendelenburg position, provides all the supports and movement necessary for gastroscopy. It carries an adjustable back rest, head rest, shoulder stop, and Henning's knee and foot pillars, all of which are detachable (Figs. 1 and 2), so that it is unnecessary to move the patient between the anaesthetizing of the throat and the passing of the instrument.

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The Attachment in Use

The technique is as follows: The patient lies on his back on the table top, with the head rest swung sideways clear of the table, the foot, knee, and back rests being removed (Fig. 1). The throat and pharynx are anaesthetized, a stomach tube is passed to evacuate the residual gastric juice, and the patient is then asked to turn on to his left side. The back rest, knee pillar, and foot-piece are now attached and adjusted to the patient's anatomy in the manner advocated by Henning, as follows (Fig. 3). The upper thigh is held between the knee pillar in front and the back rest, so that the patient cannot roll over; the lower knee is flexed in front of the knee pillar and the foot is brought behind the foot pillar. Comfortably locked in this way the patient's left leg prevents him from slipping down the table when it is tilted and allows the abdomen to be free of all pressure. The head section of the table proper is then dropped and the head rest of the attachment is swung in to support the head and adjusted for height and in the horizontal plane in both axes. The shoulder stop carried on the head rest is adjusted to prevent the patient's lower shoulder from twisting forwards.

It is explained to the patient that he is being thus securely held in order that the table can be tipped during the examination without fear of his slipping, and he is encouraged to relax his body against the supports. The instrument can then be passed without other assistance, although a second person to hold the patient's head and a nurse to hold his hands will help, if available, to increase his confidence.

The details of the table top are shown in the photographs: open on the table without attachments; with attachments in position; with the patient upon it; and finally folded up ready to be carried away. It is made of two padded sections hinged together in the middle for ease of portability. The combined head rest and shoulder stop is carried in a slotted arm, which allows adjustment for

FIG. 1.—Attachment in position on operating table ready for patient. All supports are removed and the head rest (X) is swung clear to allow the patient to lie on his back for anaesthetization of the throat.

FIG. 2.—Gastroscopy attachment complete. Note: (1) Foot pillar; (2) knee pillar; (3) back rest with [3A] adjusting handle; (4) head rest; (5) shoulder stop.

length, and swivels at the attached end so that it can be swung laterally as required. The height of the head cushion is controlled by the wheel beneath it. The foot and knee pillars slot into keyways which allow longitudinal and transverse adjustment respectively, being clamped in position by a butterfly screw on top of each. The back rest fits into a transverse carrier, which can be adjusted for position across the table by a screw action actuated by a handle.

The apparatus is made by the Genito-Urinary Company, and I would like to take this opportunity of thanking Mr. R. Schranz for his co-operation and help in the experimental stages of construction. I also wish to express my appreciation of the support given by the British Medical Association in this work.

G. Hertzberg (*Nord. med. Tidskr.*, February 5, 1938, p. 213) challenges Joslin's dictum that "diabetes is largely a penalty of obesity, and the greater the obesity the more likely is Nature to enforce it." At the Rikshospital in Oslo the author has systematically weighed 400 consecutive cases of diabetes admitted to hospital in the period from the beginning of 1931 till the spring of 1935. The height of each patient was also measured, and standard weights of normal Norwegians of various heights and ages served as controls; any weight within 10 per cent. of the normal, whether above or below it, was considered as normal. Nearly half of the juvenile diabetics were underweight, while about a third were overweight. About 20 per cent. of the men were underweight, while 33 per cent. were overweight. Of the women, about 16 per cent. were underweight, and 55.7 per cent. were overweight. As in Joslin's experience, the proportion of underweight cases was higher in young than in old patients, and this difference was greatest when the discrepancy in age was most marked. In every age group, however, the Norwegian diabetics were lighter than Joslin's American patients. Indeed, as one of Hertzberg's tables shows, there was no striking difference between the normal weight and that of his diabetics at the beginning of their disease. He concludes that his observations fail entirely to confirm Joslin's assumption that overfeeding plays a dominant part in the aetiology of diabetes. The Norwegian figures suggest that the severity of the disease was on the whole inversely proportional to the patient's weight before and at the time of the development of the diabetes, for the insulin-taking patients—that is, the worst cases—were numerically best represented among the underweight group. Half of the overweight patients could dispense with insulin, but this applied to only one-ninth of the underweight patients.

FIG. 3.—The patient in position. Note that the top section of the operating table has been dropped to allow the head rest to be swung into position.

FIG. 4.—The folded apparatus and its portable case.