

The opening in the fifth space was advocated by Dr. John Marshall on the ground that here an empyema tends to point naturally. The chest wall is very thin in this locality, and the pleura is not so well supported as elsewhere. The point indicated is external to the rectus, above the external oblique and internal to the serratus magnus, whilst it is in front of the external intercostal muscle. It is questionable, however, if an empyema does tend to point here, and the experience of surgeons is that the locality does not possess the advantages claimed for it.

When the collection of pus is localized, the point of incision will depend on the position of the accumulation, and will be made in such a position as to insure efficient drainage from a dependent opening.

In considering the place for incision, one must remember that the cavity, upon opening, tends to close from below more rapidly than from other points, and, therefore, an opening in the lowest part of the pleural cavity is not the most suitable. This is taken into account in advocating the localities mentioned above.

The operation must be carried out with strict antiseptic precautions. The patient should lie on his back, and not on the sound side; the latter position is apt to interfere seriously with respiration. In order to make the site of operation more accessible, the patient is brought near to the edge of the table. The arm is raised; but, before doing so, the position of the rib should be marked, in order to avoid a valvular incision, which one is apt to make in consequence of the superficial parts being pulled upwards by the elevation of the limb. An incision, from an inch and a half to three inches in length, is made over the upper border of the rib, and the pleural cavity opened; the pus is allowed to escape slowly, and the finger should be inserted to aid in bringing out any thick, flaky material which may be present. It is not necessary to wash out the cavity; in fact, it is not advisable to do so, at the time of operation at all events; the procedure is not devoid of danger. A tube is inserted, and this must be arranged so as to provide for efficient drainage. The tube should be as large as the intercostal space will admit and should project inward just beyond the costal pleura; a shield should always be provided, attached to the outer extremity of the tube, so as to prevent the tube slipping in, and being lost in the cavity. The writer once assisted Mr. A. Pearce Gould, of the Middlesex Hospital, London, to remove a piece of rubber drainage tube six inches long from the pleural cavity; the tube had slipped in, and disappeared in the cavity during the treatment of an empyema, and had remained in the cavity for some months. The shield of a vulcanite tracheotomy tube answers the purpose well; a rubber drainage tube, sufficiently rigid to prevent collapse, may readily be