

bronchial tubes while the operation is going on. If one is sure that there is only one abscess from which the bleeding comes and if the physical signs and fluoroscopic examination show that the abscess is superficial and the patient's life is jeopardized by recurrence of large hemorrhages, one might be justified in such instances in opening the cavity with a view to controlling the hemorrhage by ligature, or by packing. If the cavities are multiple, or if the condition is one of bronchiectasis, operation is certainly contraindicated. Nordman, in the *Gaz. des Hopitaux*, No. 87, 1906, draws attention to the possibility of hemorrhage occurring in cases of pulmonary gangrene, and to the small mention of this complication in the books. Lannee and Troussseau do not mention it at all. Grisolle, Eichhorst and Nothnagel simply refer to it. Hardy and Behier, on the contrary, clearly indicate its importance and gravity. It must be divided into two forms; the small capillary hemorrhages which are sufficiently frequent, and the grave hemorrhages, due to rupture of large vessels, and which are generally fatal.

In some instances there may be some preparation made before operation. Only too often, however, patients are brought to the hospital in a desperate condition, and require immediate relief. In other cases, for some unaccountable reason, the physicians transfer these patients to the surgical side only when they are *in extremis*. When possible, these patients should be prepared for operation in the usual way, with the added special preparation to get them to cough up as much as possible beforehand. Many of them know what position to assume to accomplish this end. They know that by turning on one side or the other—by lying on the back, or on the face, or by hanging the head low, they can empty out a large quantity of matter, which renders the subsequent operation much safer.

I prefer, when possible, to operate under local anesthesia, but this is difficult in the cases of foreigners, who cannot be spoken to and encouraged in their own language. In such cases I use ether as being probably safer than chloroform, or any mixture containing chloroform.

After portions of one or two ribs are resected over the cavity, the next question is, are the layers of the pleura smelted together and adherent? Tuffier reports 215 cases, in which the pleura was adherent in 190, or 95 per cent. It is not always easy to decide this point. Putting in a needle and expecting it to be moved up and down if the pleura surfaces are not