

pulmonary induration is clearly indicated by the increased vocal resonance and vibration, want of distension of the side, viscid sputa, and mucous rales.

Enlargement of the liver has occasionally been mistaken for empyema; but such an error could always be avoided by strict attention to the physical signs already enumerated, such as dislocation of the heart, prominence of the intercostal spaces, and bronchial respiration at the root of the lung; besides which, the previous history and accompanying symptoms could not fail to remove any remaining doubt. These two affections are, however, very frequently associated; for not only is the liver depressed in empyema by the superincumbent fluid, but owing to the pressure of the collapsed lung and fluid upon the ascending cava, preventing a free return of venous blood to the right auricle, it is also frequently much engorged. This condition, according to Dr. M'Donnell (*Dublin Journal of Med. Sci.*, 1844,) occurs as well in empyema of the left as of the right side, and is owing to the supplementary action imposed upon the liver by the imperfect decarbonization of the blood in the lungs. Whatever may be the true explanation of this congestion, its existence certainly forms an important feature in the history of empyema, particularly in reference to the operation of paracentesis. The above author also reports several cases of "pulsating empyema" of the left side, where the puriform matter in the external cellular tissue communicated with the intra-thoracic abscess, and thus received the indirect impulse of the heart. Under such circumstances, it is conceivable that these pulsating swellings might, by the careless observer, be mistaken for an aneurism, or a cancerous tumour; but the locality of the swelling, its fluctuation, the absence of thrill and rasping sound, in connexion with the extensive dulness of percussion and other physical signs of empyema, would at once distinguish it from an aneurism; whilst the absence of the cancerous cachexia, and of the peculiar elasticity so characteristic of medullary tumours, would clearly show its non-malignant character. A mere abscess of the cellular tissue, not communicating with the cavity of the thorax, could hardly be mistaken for empyema, since it would neither be increased by cough or diminished by pressure, as is generally the case when the external swelling forms but a part of the intrathoracic effusion. In like manner, by attending to the physical signs, functional disorders, and previous history, an hepatic abscess can readily be distinguished from empyema.

[The association of tubercle is a cogent contraindication to the operation, if contemplated as a curative and not simple as a palliative measure. On this point the author observes:]