

that, with the increase of the exudate in the pericardium, the heart must of necessity fall backward, because of the fact that it has a greater specific gravity than the surrounding liquid."

The puncture of the pericardium as generally advised in the fourth or fifth left intercostal spaces is not an advisable procedure as this is the spot in which one is most likely to *reach the heart*. Puncture in the third or fourth right intercostal space close to the sternal border as well as in the sixth left intercostal space is preferable especially if one finds an absolute dulness at these points. In the case of an abundant exudate the sixth left intercostal space is preferable because here the pleura is pushed farther outward and the diaphragm is depressed.

If the vessels of the heart are ligatured and divided, the heart thus set free falls to the bottom of the pericardial cavity, but when depressed by pressure while the vessels are intact it always rose again to the upper part of the cavity.

Sears. *Exploratory puncture of the pericardium with a report of three cases.* (Boston M. & Surg. Journal, Nov. 22, 1906) and Dock *Paracentesis of the pericardium.* (The Brit. Med. Journ., Oct. 20, 1906), contribute their experience in this operation while the general aspects of the subject are discussed by each. Sears has had personal observation of 13 cases with positive results in 8 cases. He chose the fourth and fifth right spaces, the fifth and sixth left inter-spaces, at or beyond the extreme limit of dulness, making twenty-three attempts. His greatest number of successes were obtained through the fifth or sixth space at or beyond the outer limit of dulness. This route has the great disadvantage of traversing the pleura and often the lung and is especially unfavourable in purulent pericarditis. Sears says the needle always comes in contact with the heart during some part of the process. In fact that organ is sought when the flow is not immediate in order to insure the presence of the needle in the sac. The heart seems very tolerant of puncture and according to evidence here adduced from West and others, the operation from the point of view of cardiac injury must be considered reasonably safe. Sears regrets that paracentesis pericardis is so rarely resorted to and so reluctantly undertaken, and urges its early and more frequent adoption where there is marked pericardial effusion. Dock discusses the methods of paracentesis and opening of the pericardium, remarking that operations upon the pericardium are never free of danger, but they are justified by the possibility of more serious danger that exists in many cases.

Further reports on the value of X-Ray in the *diagnosis of pulmonary tuberculosis* have been made during the past year. H. Adam (Verhandlungen des Kongresses für Innere Medizin 673 xxiii Kongress),