

The Position of the Heart in Pericardial Effusion

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Since the day of Skoda, the teaching has prevailed, especially among the Germans, that in pericardial effusion the heart, owing to its greater specific gravity, sinks in the fluid and falls backward when the patient is recumbent.

An interesting and instructive article (abstracted in the *American Journal of the Medical Sciences*, from which we quote), the second contribution on this subject by the same author, recently appeared in a French journal. Nine years ago this author, a Russian, Schapozhinkoff, established the fact that the German teaching is fallacious. At that time he concluded, from experiments made on the cadaver, that (1) with the increase of the exudate in the pericardium the heart need not necessarily fall backward; (2) that there may be abundant exudate without adhesions, and yet friction may be present; (3) that puncture in the pericardium in the 4th or 5th left intercostal space is inadvisable and likely to strike the heart; (4) puncture in the 3rd or 4th right intercostal space close to the sternal border, or in the 6th left intercostal space, is preferable, especially if there be found absolute dullness at these points.

Since the author's first report, his views have been abundantly corroborated by others. He finds that the heart lies normally very close to the chest wall even when the individual is on his back, and that it is held in place by the large vessels. Even when a large pericardial effusion is present, this position is maintained and a friction rub may be present.

"This tendency of the heart to remain near the anterior chest wall he believes to be due to the influence of its attachment to the basic vessels. It was observed in his experiments that if the vessels are ligatured and the heart and its contents set free it will fall to the bottom of the pericardial cavity. But if the attachment remained, although pressure by a probe or finger temporarily pushed the heart backward, it always rose again slowly to the superior position. The author would appear to be justified in his conclusions that the false opinions which have reigned in science more than half a century concerning the position of the heart in pericardial effusions, are wholly refuted. The heart does not sink in virtue of its specific gravity, as has been thought, but floats, and is to be found above the pericardial fluid."

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