

præcordial pain. The dullness has not increased at the base of the left lung, but fine crepitations may be heard all over the chest.

There is some cedema of the ankles.

March 4, 1909.—She is gradually becoming weaker. The face is very pale. The lips, hands and feet are blue, with cedema of the ankles. She has to sit up to breathe, and no radial pulsation can be felt.

The dullness at the base of the left lung is somewhat increased. Over this area there is a definite to and fro friction rub, and large rhonchi are heard all over the chest. The sputum is still tinged with blood, is viscid and closely resembles that in pneumonia. The liver dullness has not changed.

Temperature 98-101. Respiration 33-44. Pulse 118-120.

(Death followed shortly after the above note).

Autopsy performed 20 hours after death by Dr. MacLachlan.

*Anatomical Diagnosis.*—Acute and chronic endocarditis; chronic pericarditis; lobar pneumonia; chronic pleuritis; passive congestion of liver and spleen.

The *Peritoneal Cavity* contains a small amount of clear straw-coloured fluid.

*Pleural Cavity.*—There are a few recently formed fibrous adhesions at the base of the right lung. The lower lobe of the left lung is definitely pneumonic.

*Pericardial Cavity.*—The visceral and parietal pericardia are firmly adherent by a dense fibrous exudate which almost completely obliterates the sac.

*Heart.*—Weight 280 grms. The myocardium is slightly pale in colour and of somewhat friable consistence. The aortic valve measures 6 cm; and on its cusps are a few small recently formed vegetations. The mitral valve measures 9 cm., its cusps are considerably thickened, and engrafted on them are a few small reddish vegetations.

The coronary arteries are normal.

On opening the ankle joint in this case the amount of fluid is only sufficient to moisten a swab and, therefore, too small to determine its appearance. The synovial membranes, however, appear normal.

*Bacteriological Report.*—Cultures made at autopsy from the heart's blood, the pericardium and the left ankle joint revealed the pneumococcus.

*Case III.—Clinical Summary.*—Acute rheumatism at 13 years of age. Present illness began with arthritis. 9th day slight hydrothorax. 37th day aortic insufficiency. Death 101st day.

S. R. Female. Age 14. Service of Dr. Finley. Was admitted to