

the General Hospital on December 3, 1908, complaining of pain and swelling of both knees.

*Personal History.*—She was born in Russia, came to the United States at 10 years of age and to Canada 4 months before admission. At thirteen she was in a New York hospital 2 weeks with acute rheumatism involving the right knee, and at this time she was told she had a weak heart. She has never had a sore throat, dyspnoea, or epistaxis. She has had an occasional cough, but no sputum, and has never noticed any swelling of her feet. The present illness began 4 days before admission with pain, slight swelling and tenderness of the right knee, loss of appetite and general feeling of malaise. She had no chill and did not perspire.

*Present Condition.*—Patient is a slender, moderately nourished girl of 14 years. She is bright and intelligent. The skin is pale, warm, and moist. The mucous membranes are somewhat pale and the tongue coated. The subcutaneous tissue is in moderate amount, and the muscles are of fair size.

Pulse 116. Temperature 100. Respiration 28.

Both knee joints are swollen, red, tender and painful. Fluctuation is distinctly present with well-marked riding of the patellæ. No other joints are involved.

The glands in the right axilla are enlarged and palpable, elsewhere they are normal.

*Circulatory System.*—The pulse is rapid, 120, regular, of small volume and low tension. There is no capillary pulsation. A diffuse cardiac impulse is seen in the 4th and 5th interspaces, the point of maximum intensity being in the 5th space 11 cm. from mid line.

The relative cardiac dullness extends 5.5 cm. to the right and 13.5 cm. to the left of the mid sternal line, and vertically, the dullness extends to the middle of the manubrium sterni.

A presystolic thrill can be definitely palpated at the apex. Here, also a rough presystolic murmur can be heard, followed by a blowing systolic murmur transmitted to the axilla and back. A gallop rhythm is heard just inside of the left nipple line in the 3rd and 4th intercostal spaces.

At the base a diastolic murmur is heard over the aortic cartilage, and transmitted for a short distance down the left side of the sternum. The pulmonary sound is much accentuated.

*Urine.*—Spec. Grav. 1027, neutral. Albumen present; also a few red blood cells and leucocytes.

The white cell count is 9,360.

*Diary.*—December 4, 1908.—The pain and tenderness in the knees