

pelvis, whence the blood evidently came. The kidneys were slightly granular. The bowels were found unobstructed, although it was thought that the blood clot might have pressed unduly on the ascending colon, and interfered with its functions.

CLINICAL NOTES ON HÆMATEMESIS IN CHRONIC SPLENIC TUMORS, BY DR. OSLER.

Dr. Osler commenced his paper by alluding to the frequency with which hæmorrhages are associated with all forms of splenic tumors, especially in that accompanying leucocythemia, a depraved condition of the blood seeming to be the chief factor in their production, they being also met with in profound anemias, not of splenic origin. Epistaxes are the most frequent, and next hæmorrhages from the bowels, but hæmatemesis, hæmoptysis and hæmaturia are also occasionally met with. Of 150 cases of leucocythemia collected by Gowers, hæmorrhages occurred in eighty, and eight of these were from the stomach. The point to which attention was chiefly called was the possible occurrence in some instances of severe, perhaps fatal, hæmatemesis, even before the constitutional symptoms are marked, and indeed may be the first symptom complained of; and hence the great importance of directing the attention to the spleen as well as to the liver as a possible cause in an attack of vomiting of blood. In illustration of this fact, the following cases were referred to:

Case 1. J. H., æt. 36, admitted to hospital, September, 1879, with anemia. Has been healthy and temperate, had intermitting fever in India. In January, 1877, had an attack of vomiting of blood, preceded by slight indisposition, weight in abdomen and nausea; had three attacks that week, each time losing a large amount of blood, and was much reduced. Strength returned slowly, and he resumed work. In July had another single large hæmorrhage with a severe diarrhoea, and shortly after another hæmorrhage. During July and August the abdomen, which had been noticed somewhat prominent at beginning of trouble in January, now increased considerably. On admission there was marked anemia, abdominal distension and œdema of ankles. Spleen greatly enlarged. The blood was thin and watery, and microscopically presented characters of anemia. Red corpuscles reduced below two millions to cubic millimetre and hæmaglonia correspondingly diminished. No leukœmia. Heart's action was always a little excited; pulse about 100; hæmic murmur present;

sweats were troublesome. He took iron with benefit, œdema of ankles disappeared, and belly diminished in size; left hospital in a month, during which time he had no hæmorrhage. He died subsequently at home from effects of a severe hæmorrhage.

Case 2, August 13th, 1882. A little girl, æt. 11, brought from Kingston, Ont., for examination; of good family history and of previous good health, excepting four years ago, when she was not very well, and the mother thinks she vomited a quantity of blood-tinged matter, but this is doubtful. Two years ago, during a slight indisposition, with some pain in abdomen, which also appeared swollen, she had a severe hæmatemesis, lasting over twelve hours vomiting a basinful of blood. Recovered from this and seemed to thrive, although pale. In July last, one month ago, a brother died, and the excitement brought on another attack, lasting thirty-six hours, and she lost nearly three quarts of blood, and since then has picked up rapidly. She was well nourished and stout, but face pale, and puffy look about eyes. Complained of uneasy fullness about stomach, swelling of feet in evenings, and shortness of breath when walking fast or going up stairs, and lately her appetite has failed. Heart and lungs appeared normal; sounds clear; no murmur. Abdomen a little distended, panculus adiposus thick, splenic tumor extends three inches below costal border and to within an inch of navel, edge clearly felt and not painful. Liver not enlarged. Abdominal veins not distended, no signs of ascites. Blood thin, corpuscles normal in size and general appearance, no increase of the colorless elements. Red corpuscles  $2\frac{1}{4}$  millions per cubic millimetre; ratio of white to red 1 to 316.

Dr. Osler then referred to two cases occurring in the practice of Dr. R. P. Howard, which also illustrated the same point.

Case (a). A plump, well-nourished lad, æt. 13, four years ago was unwell and passed blood from the bowels, and was pale. On the 12th April last had an attack of vomiting of blood, and shortly after a large bloody stool. On the day before had played "Lacrosse" and seemed in fair health; he died four days after from the effects of repeated vomitings, having lost about four pints of blood. The spleen was enlarged and the blood leukæmic. At the autopsy the spleen was found much enlarged, weighing 480 grains. No erosions or ulceration of stomach; mucous membrane pale.