

the authors have been unsuccessful thus far with inoculations of material passed through a Berkefeld filter. Spontaneous cure has been observed in one hen, while Ellermann and Bang had a similar finding in two instances. Cultures from the organs were without result. Attempts to transfer the disease to pigeons, rabbits, and guinea-pigs have failed. The authors believe that each species has its own leukemia, since the human disease has thus far not been successfully transmitted to lower animals.

The authors have begun experiments similar to those detailed above, employing anthropoid apes, inoculated with the blood of myeloid leukemia of man. As yet, no positive results have been obtained, though it is too early to foretell the outcome of the experiments.

Some work has been done with deviation of complement in chicken leukemia, but nothing of value has been determined.

Experimental Paroxysmal Tachycardia.—LEWIS (*Heart*, 1900, i, 98) gives a very complete account of the abnormalities of cardiac rhythm following ligation of the coronaries, and pays especial attention to the production of paroxysms of tachycardia with abrupt onset and cessation. In addition to the production of paroxysmal tachycardia, ligation of the descending branch of the left coronary artery may be the cause of the ventricular extrasystoles, single, successive or retrograde, while ligation of the complete right coronary artery with the subsequent anemia of both auricle and ventricle may cause auricular, "nodal," or ventricular extrasystoles, which may be isolated, frequent, and regularly placed, or in groups. Paroxysms of tachycardia were obtained in nine out of twelve dogs, in which the right coronary artery was tied, but in most instances they only set in an hour or more after the circulation was interfered with. The average ventricular rate during the paroxysms was 253, but in some attacks it was over 400. The rhythm was generally regular, and frequently each ventricular beat was followed by a contraction of the auricle at a time interval which slightly exceeded the *a-v* interval of the normally beating ventricle. The duration of the paroxysms varied from a few seconds to thirty-five minutes. The paroxysms were usually preceded by extrasystoles arising in the ventricle—after a short number of beats, retrogression to the auricle took place. When, however, the original sinus rhythm was rapid, the auricle may remain at its former rate, so that there is a complete auriculoventricular dissociation. In some instances, shortly after the onset of the paroxysm, fibrillation of the auricle occurs, apparently the result of impulses showered upon it from above and below. The fibrillation may terminate in response to sinus or to ventricle. Reversed heart block, showing most of the characteristics of the usual condition, may be met with during the paroxysms. Stimulation of the vagus during the paroxysms of tachycardia usually resulted in dropped auricular beats, without change in the ventricular rhythm, but in three instances complete, temporary standstill of the heart was obtained, followed by a return to the normal rhythm. In some cases, then, the ventricle of the dog is under control of the vagus. Alternation of the ventricles was frequent during the attacks of tachycardia. The paroxysms usually terminated by an abrupt return to the normal rhythm, but sometimes ventricular

fibrillation set in. Irregularities, almost always ventricular extrasystoles, may follow the resumption of normal rhythm. Lewis believes that paroxysmal tachycardia proper, as met with in experiment and in man, is the result of intrinsic change in the heart walls, giving rise to the production of ectopic impulses. The paroxysm has its origin in the ventricular musculature, and is constituted by the establishment of a continuous succession of what are usually designated as extrasystoles. It may be supposed that the paroxysm is the result of a local and enhanced irritability, the offspring of anemia. There is a very close analogy between the experimental tachycardia produced by Lewis and the ventricular form of paroxysmal tachycardia as seen in man.

The Effect of Trypsin on Cancer in Mice.—In order to determine whether trypsin has any actual effect on cancer, RUSHMONE (*Jour. Med. Research*, 1909, xxi, 591) has tested it on mice inoculated with an adenocarcinoma. In those mice in which the tumor was of moderately or very large size the injection of trypsin showed absolutely no beneficial result. In the animals with early tumors cure or spontaneous recovery resulted in 43 per cent., a figure about that which is given as the percentage for spontaneous recovery. Histological examination revealed no evidence of the trypsin having acted on the tumor cells. Those cells around the bloodvessels were in the best condition, and no especial injury to the cells lying on the periphery of the tumor, nearest the point of inoculation, could be made out.

The Bacteria of the Stools in Cancer of the Stomach.—BROWN (*Jour. Amer. Med. Assoc.*, 1909, liii, 1525) has confirmed the findings published from Neusser's clinic as to the presence of Boas-Oppler bacilli in the stools of cases of gastric carcinoma. Smears of the stools are made and stained by Gram's method. A "Gram-negative" stool excludes cancer of the stomach, while a smear showing the presence of the Gram-staining Boas-Oppler bacillus is more easily demonstrated in the stools than in the gastric contents, but it is rather readily confused with other organisms. Brown found Gram-positive stools in all cases of gastric cancer, and Gram-negative stools in both acute and chronic gastric ulcer. In four cases in which the clinical diagnosis was gastric or pyloric ulcer, but in which bacteriological examination showed Gram-positive stools, operation or autopsy revealed a carcinoma.

The Causes of Sudden Death.—BROWN (*Med. Press*, 1909, lxxvii, 414) has analyzed 183 cases in which death occurred suddenly, before or just after the patient was admitted to the hospital. Liability to sudden death is greatest at two epochs; from birth up to three years, and from thirty years onward. From three to fourteen there is practical immunity, while from fourteen to thirty very few cases occur. Of 63 cases under five years of age, 52 occurred in the first year of life. The postmortem findings show a greater variety in children than in adults. Among the conditions met with were pulmonary collapse, suprarenal hemorrhage, and lymphatism. In more advanced life vascular degeneration is the great cause of sudden death. Of 109 cases over twenty-one years old, heart disease was the cause of death in 31