

THERAPEUTICS

UNDER THE CHARGE OF

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The Treatment of Leukemia with Röntgen Rays.—BIERMANN (*Deut. med. Woch.*, 1912, xxxviii, 7) relates the details of 5 cases of leukemia treated by x-rays. One patient has remained apparently cured for eighteen months. This patient before treatment had a leukocyte count of 450,000, with a hemoglobin percentage of 55, and a red blood count of 2,600,000. Her blood picture and the marked enlargement of the spleen made the diagnosis clearly one of myelogenous leukemia. After the treatment the number of leukocytes was 12,500 and the spleen could no longer be felt. The general appearance of the woman was that of a perfectly well woman, although a differential count showed the presence of a considerable percentage of myelocytis. Biermann believes that myelogenous leukemia, especially in its early stage, is more amenable to x-ray therapy than other forms of leukemia. For this reason he emphasizes the importance of making an early diagnosis of leukemia. Biermann favors gradual and low dosage of the rays and notes briefly his method of procedure in applying this treatment to leukemic patients.

The Use of the Karell Diet in Heart Disease.—His (*Therap. Monats.*, 1912, xxvi, 10) mentions the indications for the Karell milk diet in various circulatory disturbances, and cites cases very favorably influenced by this method of treatment. The Karell "milk cure" is essentially a restriction to a strict diet of 800 c.c. to 1000 c.c. of milk a day, for a period of five or six days. This amount of milk does not, of course, furnish the necessary caloric value for the patient, and the treatment should be carried on only in bed patients. The indications are summed up under a number of different classes of patients: (1) His does not advise the usual Karell cure for cardiac disturbances in obese patients, but only the interposition of an occasional "milk day," as he believes that sudden cardiac weakness may occur if they are kept on too strict a diet for a long period of time. (2) Patients with chronic bronchitis and emphysema associated with increasing weakness of the right heart are much benefited by the Karell treatment. The dyspnea in such patients subsides in a few days on the Karell diet, and longer courses are seldom necessary. (3) Patients suffering from cardiac asthma with degeneration of the myocardium show a rapid improvement of all the symptoms that is often surprising, especially after heart tonics and sedatives have failed to relieve. After a week at most these patients can be allowed a light diet with a limitation of the fluids to 1000 to 1200 c.c., and if necessary the Karell diet may be repeated. (4) True angina pectoris is often remarkably benefited by

this treatment, especially the milder forms, in which the attacks are not severe but are frequently repeated. The results are especially good in plethoric patients with a tendency to metrorrhagia, in whom the anginal attacks are incited by an overloaded stomach or by distended intestines. (5) Insufficiency of the kidneys is known to be benefited by a milk diet, especially when the heart shows signs of weakness, or if there are symptoms of impending uremia. (6) Valvular defects as such are no indication for this treatment, but when the heart muscle becomes insufficient and edema develops, much benefit is obtained by the limitation to the Karell diet. (7) Persistent effusions in the serous membranes often yield quickly to a Karell cure. Von Romberg has recommended the advantages of a salt-poor diet in tuberculous peritonitis. He believes that pleural and pericardial effusions disappear more readily than peritoneal effusions with this method of treatment. (8) This method is of great value as a supplement to digitalis therapy when neither alone is effectual. He cites instances in which digitalis and other diuretics had no effect until after a period of restriction to the Karell diet. In one patient diuresis commenced on the sixteenth day after the restriction to milk, and in another case the diuresis began on the sixth day and did not reach the maximum until the twelfth day.

The Use of Subcutaneous Injections of Heroin in Cardiac Asthma.—FRAENKEL (*Therap. Monats.*, 1912, xxvi, 14) believes cardiac asthma is primarily due to a passive congestion of the pulmonary circulation. This congestion produces an overdistention of the alveolar capillaries, and consequently a diminution in the size of the alveolar spaces. As a secondary effect of the pulmonary congestion, swelling of the mucous membrane of the finer bronchioles occurs and the lumen of the finer bronchial tubes is often further diminished by spasms of the bronchial musculature. Fraenkel says that morphine acts very favorably upon all these causes of the dyspnea and hence its therapeutic effect in cardiac asthma is usually remarkable. Morphine, however, is open to the objection that it does not act so favorably when its use is long continued. Fraenkel recommends heroin as a substitute for morphine on the ground that heroin has the distinct advantage that it may be given daily for periods of weeks without losing its beneficial effects. The initial dose given by Fraenkel is 0.005 grams, and it may be increased to 0.015 grams. It is often of distinct advantage to combine the heroin with some form of digitalis or other cardiac tonics.

The Action of Iron in Chlorosis.—HEUBNER (*Therap. Monats.*, 1912, xxvi, 44) advances the hypothesis that in chlorosis the ability to reduce the higher salts of iron, the ferric salts, to the lower bivalent forms of iron, the ferrous salts, is lost. The iron in the food is in the form of the higher salts, and chlorotic subjects are not able to assimilate it. He believes that the empiric use of Bland's pills, of syrup of ferrous iodide, and certain natural mineral waters that contain iron in the bivalent form is justified upon the basis of his hypothesis. The clinical fact that these preparations are particularly useful in the treatment of chlorosis tends to strengthen the theory as advanced by Heubner. On the other hand, the therapeutic effects of iron preparations, such as ferratin, ferrum, oxydatum saccharatum, and hundreds of pro-