

BLOODLETTING, BLISTERS, AND EMETICS.

A. ROBIN (*Bull. de l'Acad. de Méd.*, No. 4, 1898), after remarking on the almost total neglect of some of the older methods of treatment, gives his investigations into their action. (I) Bleeding has been almost abandoned, since its action is supposed to be mechanical in modifying the blood pressure or getting rid of some poison contained in the blood evacuated, and therefore too temporary to be of much good. When one considers its action on nutrition, however, new indications for its use are found. (a) Action on nutrition. The author and Binet find that a moderate bleeding (150 to 250 g.) in an acute disease such as pneumonia increases nitrogenous metabolism, favors the formation of its end products by oxidation, and stimulates the chemical changes which take place in the nervous system. The same effects are seen in bleeding for uræmia or morbus cordis, and in pathological hæmorrhages such as hæmatemesis. (b) On respiration. Bloodletting (and menstruation) increases the respiratory changes in every detail to a certain extent in proportion to the amount of blood lost. The oxygen absorbed, urea, and the coefficient of nitrogenous oxidation, are all increased. The indications for its use are therefore: (1) For its temporary effect on the blood pressure, in cardiac syncope, acute œdema of the lungs; and cerebral hæmorrhage; (2) where nutritive action is insufficient, as shown by a lowering of the respiratory changes, the percentage of urea and coefficients of oxidation. (3) In some infective diseases when the symptoms are caused by bacterial toxins which can be got rid of in two ways, either by excretion or by oxidation, which latter converts them into harmless soluble products. (4) In some auto-intoxications, such as uræmia, venesection acts not so much by subtracting a certain quantity of the poison with blood as by oxidising the poison into a harmless soluble product. (II) Emetics. The author finds that besides clearing the bronchi, emetics, like venesection, increase oxidation. The gaseous changes in respiration are increased in every detail, this action being partly mechanical, a larger quantity of air passing in and out, and partly vital, there being a greater amount of oxygen absorbed and more CO_2 given out per volume of expired air. Emetics are of the same value in infective bronchitis as purgatives in intestinal infections, while there are few contraindications. (III) Blisters are useful for their revulsive and derivative properties, and because they increase phagocytosis. Besides this, Robin finds that they increase the amount of air passing through the lungs in a given time ("pulmonary ventilation") to such an extent that the oxygen absorbed may be doubled. There are contra-indications, such as albuminuria; otherwise blisters are of great value in acute or chronic pulmonary complaints.