

hold that uric acid is the result of decomposition of cellular elements in all parts of the body, and the leucocytes are the chief sources, and it varies in the amount produced according to the percentage of leucocytes in the blood, being increased in all affections where leucocytosis is present. The apparent exception to the rule Dr. Wells explains as follows: Agents in the blood having a chemiotactic influence may cause the leucocytes to be attracted away from the central organs to the peripheral circulation, so that blood examined from this part would indicate leucocytosis when there would be no actual increase from the normal, which is quite different to an increased production of new cells raising the total number. He claims that the more mature and more active multinuclear leucocytes respond more readily to chemiotactic influence than the young uninuclear form, so that the apparent leucocytosis chemiotactically produced would be multinuclear, but when real leucocytosis is present, an increased production of young uninuclear cells from the hæmatopoietic organs obtains, as in leucæmic chlorosis, diabetes and the leucocytosis of digestion. The increase of uric acid follows the increase of the uninuclear cells rather than the older multinuclear. But the increase is present also in cancer and pneumonia when there is a multinuclear leucocytosis; this he explains may result from the possibility that chemiotactic substances which drive the old cells to the periphery, causing a relative leucocytosis, may also stimulate an increased production of young cells while typhoid fever has been given as an instance of the increase of uric acid not dependent upon a leucocytosis, this being one of the very few fevers in which a condition of leucopænia occurs—that is to say, lessened number of the leucocytes. But, if viewed from the standpoint here taken, the apparent inconsistency may disappear. Examinations of the blood in typhoid go to show that, though the multinuclear cells are decreased, at the second or third week there occurs a lymphocytosis. This agrees with the studies recently made in this disease by Behrend and Adler (*National Medical Review*, Washington, April, 1898), according to which the excretion of uric acid rises notably toward the latter part of the disease.