

important to clarify two common misconceptions. First, although leukemia is an overproduction of white blood cells, most often the leukocyte count is low. Instead, the peripheral blood smear and, more definitively, the bone marrow examination reveal greatly elevated counts of immature cells, or blasts. Second, these immature cells do not deliberately attack and destroy the normal blood cells or vascular tissues. Cellular destruction occurs through the process of infiltration and subsequent competition for metabolic elements. The following discussion elaborates on the pathologic process and related clinical manifestations in the most susceptible organs of the body (Fig. 25-3).

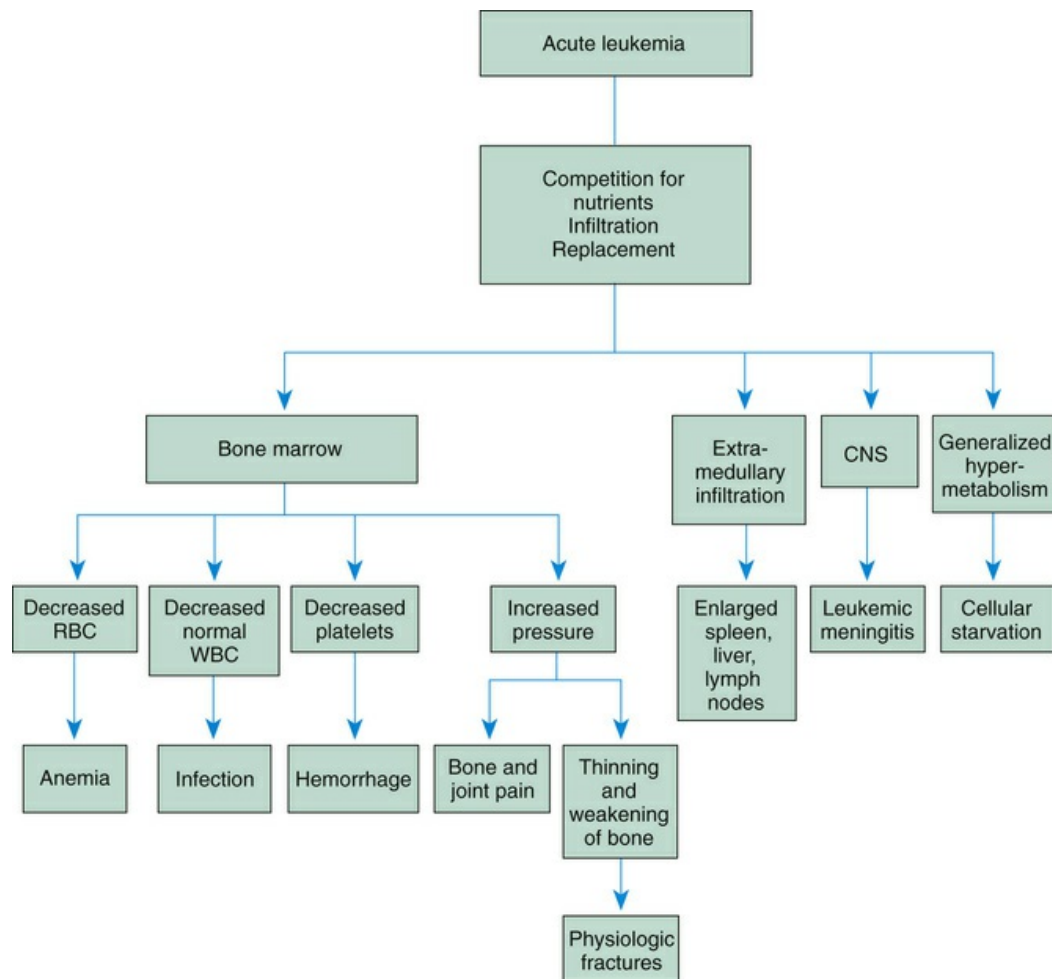


FIG 25-3 Principal sites of tissue involvement in leukemia. CNS, Central nervous system; RBC, red blood cell; WBC, white blood cell.