

Population-based studies and case reports suggest that there may be an increased risk of acute leukemia associated with sickle cell disease (SCD). The increased risk of leukemogenesis is certainly multifactorial and related to the pathophysiologic mechanisms of the clinical manifestations of SCD. Most cases study showed myelodysplastic features confirmed, when available, by genetic markers such as chromosome 5 and/or chromosome 7 abnormalities and TP53 gene mutations.