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Acute megakaryoblastic leukemia in a pediatric patient

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A 6-month-old patient was referred to our hospital due to abdominal discomfort and additional nonspecific symptoms, including restlessness and refusal of nourishment. Differential blood count analysis yielded marked leukocytosis with 60,000 G/L leukocytes and thrombocytopenia. Reactive causes of this altered hematological and clinical state were excluded, and a leukemic disease was suspected, primarily acute lymphoblastic leukemia (ALL) as this entity is the most common leukemia of childhood.[1] Microscopic investigation of the peripheral blood confirmed acute leukemia with 29 % blasts; however, unexpectedly, the blasts did not appear as typical ALL blasts. Immunophenotyping confirmed megakaryoblastic leukemia as these blasts were positive for CD13, CD33, CD41, and CD61.[2]

Figure 1

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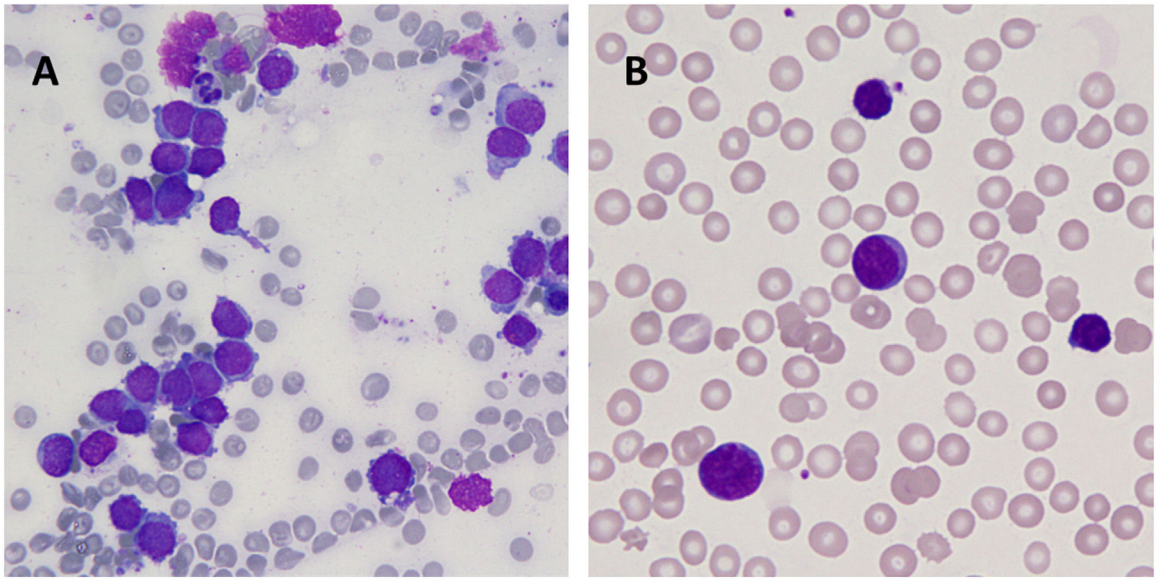

Figure 1 – In bone marrow investigation the megakaryoblasts were enlarged with basophilic cytoplasm, distinctive pseudopods ("blebs"), and cytoplasmic projections. In addition, clusters of megakaryoblasts were detected (A). In peripheral blood the megakaryoblasts showed scant cytoplasms and dark stained nuclei (B).

Conflicts of interest

The authors declare no conflicts of interests.

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