ACUTE LYMPHOBLASTIC LEUKEMIA PRESENTING WITH CUTANEOUS INVOLVEMENT

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Primary cutaneous involvement in B-cell lymphoblastic leukemia is rare in childhood. We present a case of 2-year-old girl admitted to our hospital because of left scapular skin lesion and left axillary mass. She was looked pale and weak. Left axillary lymph node package of 5 cm diameter and left scapular skin lesion was revealed by physical examination. Complete blood count revealed 124,000/mm³ white blood cell count. Peripheral blood smear showed 99% lymphoblasts. Bone marrow aspiration revealed 95% blast cells with immunophenotype and morphological characteristics of pre-B type acute lymphoblastic leukemia with L1 subtype. ALL St Jude Total XIII remission induction treatment protocol was started. Skin lesion disappeared after 15th day of the cytotoxic therapy. On the follow up, she was on remission and continued to maintenance chemotherapy for 6 months. We would like to highlight that a small growing cutaneous lesion could be the presenting form of acute lymphoblastic leukemia.

Keywords: Lymphoblastic leukemia, cutaneous involvement
DISCUSSION

Various cutaneous lesions can be observed in patients with hematologic malignancies. These include specific cutaneous lesions resulting from infiltration of the skin by the malignant cells, characteristic diseases such as pyoderma gangrenosum and Sweet syndrome, cutaneous signs of infection or hemorrhage resulting from the bone marrow dysfunction induced by the malignant process or chemotherapy.

The frequency of leukemic infiltration of the skin is variable according to the type of leukemia. Cutaneous involvement is a common finding in AML with monocytic differentiation while it is a rare event in ALL (3). Dunn et al. (4) reported 2 patients with leukemic infiltration of the skin among 40 children with ALL. In another study, 15 patients with initial leukemic infiltration of the skin among 1359 children with ALL was reported (5).

There was no agreement on association between skin lesions and prognosis (5-7). Cutaneous involvement can be observed not only among high risk ALL patients but can also be observed among low risk patients. Millot et al. (3) reported 9 of the 15 children with initial leukemic infiltration of the skin have unfavorable prognostic factors like high leukocyte count, hepatosplenomegaly and age under 12 months. The skin lesions of these patients can be regarded as a dissemination of aggressive leukemia to the skin. Su et al. (6) reported that; appearance of specific skin lesions in leukemia is usually associated with a very poor prognosis. In a previous report of 25 cases of ALL in infants, skin infiltration was associated more closely with the patient’s age (early period of infancy) than with karyotype abnormalities (8). In our patient, high leukocyte count was thought to be as a poor prognostic risk factor.

In the patient, skin lesion was disappeared within 15 days after the cytotoxic therapy and complete remission was obtained after induction therapy. We would like to highlight that a small growing cutaneous lesion could be the presenting manifestation of acute lymphoblastic leukemia.

REFERENCES

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