



2021 Annual Spring Virtual Meeting | Abstract Submission Form

Leukemia Cutis as the Initial Presentation of Acute Myeloid Leukemia

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An 80 year-old gentleman presented to dermatology with two weeks of progressive, asymptomatic, papulonodules on the trunk and a two-month history of an enlarging mass within the left nares. He denied fevers, night sweats, or weight changes. While biopsy results were pending, the patient presented five days later with spreading cutaneous lesions, worsening nasal obstruction, and bilateral lower extremity pain. Due to concern for metastatic malignancy, he was referred to the emergency department, where he received a biopsy of his nasal lesion. Both biopsies revealed similar findings consistent with myeloid leukemia cutis (LC) with monocytic differentiation. Pathology demonstrated large, monomorphic mononuclear cells with high nuclear to cytoplasmic ratio, prominent nucleoli, and many mitotic figures. Immunohistochemical (IHC) stains were positive for CD4, CD43, CD56, CD68, CD163, and myeloperoxidase. Notable labs included pancytopenia with 46% lymphocytes, 30% monocytes, and LDH of 322. A CT scan revealed vertebral lytic lesions. Bone marrow biopsy confirmed acute myeloid leukemia (AML) with 42% blasts and >95% cellularity. Treatment was initiated with Vidaza/Venetoclax combination therapy. Here is a case where LC was the initial presentation of aggressive AML. LC describes the diffuse infiltration of neoplastic leukocytes into the epidermis, dermis, or subcutaneous tissue, and is quite rare.^{1,2} Rarely, LC is the only presenting symptom in an otherwise asymptomatic patient, which represents a dismal prognosis with time from diagnosis to death averaging 4.4 months.³⁻⁶ Thus dermatologists must recognize the diverse presentations of LC and coordinate aggressive management with other providers in order to enhance patient outcomes.³⁻⁵

Clinical Images:



Image 1: Obstructive polyp within left nares



Image 2: Diffuse papulonodular rash on trunk



Image 3: Closer image of papulonodular lesion on trunk

References

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