Multiple Myeloma patients may exhibit signs and symptoms of skin involvement secondary to either malignant cell infiltration or disease-specific treatment. Also, there are anecdotal reports of paraneoplastic skin diseases including Sweet syndrome, leukocytoclastic vasculitis and neutrophilic dermatosis associated with multiple myeloma (1). In this report, we share a patient with a remarkably rare skin presentation of multiple myeloma.

A 57-years-old female patient presented to the dermatology clinic with itching, discoloration, hardening, and exfoliation involving hands, feet, head and back. Physical examination revealed scalp scaling, hyperkeratosis of all fingernails in both hands and feet, yellowish discoloration, scaly plaques in palms, thick yellow-gray crusts in soles and ichthyosiform appearance in trunk (Figure 1a). Laboratory evaluation results were as follows: Serum creatinine: 1.5 mg/dL, total protein: 14.4 gr/dL, albumin: 2.28 gr/dL, corrected calcium: 11.74 mg/dL, lactate dehydrogenase: 322 U/L, hemoglobin: 6.9 gr/dL, platelet: 103000/mm³, and urine protein/creatinine ratio: 3.29 gr/day. A skin lesion biopsy performed showed Bazex syndrome (acrokeratosis paraneoplastica) and she underwent investigation to reveal a possible underlying malignancy. Upper and lower GI endoscopy and FDG PET-CT were normal. She was referred to our clinic for hematologic evaluation. Due to her anemia, elevated creatinine level and high total protein-to-albumin ratio, plasma cell dyscrasias were suspected and related tests were ordered. Serum immunofixation electrophoresis showed IgG lambda monoclonal band. Serum free kappa light chain was <6.50 mg/L, free lambda light chain was 475 mg/L and β2-microglobulin was 14 mg/dL. She patient did not have polyneuropathy,
organomegaly, volume overload, endocrinopathy, papilledema, thrombocytosis, or polycythemia and therefore POEMS syndrome was excluded. Bone marrow aspiration and biopsy confirmed plasma cell myeloma (95% infiltration rate, CD38+, CD118+, CD56+, lambda +, kappa - and Kongo stain negative) and FISH was negative for t(14,16); t(4,14); t(11,14) and del(17p13) mutations. The patient was started on bortezomib, cyclophosphamide and dexamethasone chemotherapy along with topical steroids for the skin lesions as suggested by dermatology. After 4 cycles, her skin lesions were markedly regressed (Figure 1b). Bone marrow aspiration and biopsy showed remission and the patient was referred for autologous stem cell transplantation.

Bazex syndrome is characterized by hyperkeratosis of the acral regions, mostly seen in men over 40 years of age. Lesions are often seen on the nose and ears, less frequently over the acral areas such as nails, hands, feet, knees, and elbows. Lesions appear as erythematous, violet purple and symmetrically distributed papulosquamous plaques (2, 3). Even though its exact etiology is unclear, possible proposed mechanisms include antibodies against the tumor cross-reacting with skin antigens, tumor secreting growth factors such as TGF-α that alter epidermal proliferation and genetic susceptibility due to HLA A3 and B8 (4). Bazex syndrome may be associated with various malignancies, mostly with squamous cell carcinomas of head and neck. However, it has also been shown to be associated with many malignancies including hematological malignancies (5).

In our literature search, we were able to find only one report of multiple myeloma and Bazex syndrome association (6). This anecdotal association should be considered in patients investigated for Bazex syndrome.

Keywords: Bazex syndrome, acrokeratosis paraneoplastica, multiple myeloma, paraneoplastic syndrome

Conflict of Interest
The authors declare that they have no conflict of interest

Funding
There is no funding source

Ethical Approval
Verbal and written informed consent were obtained from the patient.
References


Figure 1. (a) Patient’s lesions at presentations (b) Patient’s lesions after chemotherapy