The involvement of organic solvents in eosinophilic fasciitis has been reported.[3] Our patient further developed hematological malignancy during the course. Dichloromethane and 1,2-dichloropropane were carcinogenic, ink-removal agents used in the printing industry, that can cause cholangiocarcinoma,[4] and we suspect that they were contained in the organic solvents used by our patient. This might have played a role in the occurrence of hematological malignancy.

Eosinophilic fasciitis is sometimes associated with several autoimmune conditions, among which morphea is the most frequent but association with generalized morphea is rare. Furthermore, association with vitiligo and eosinophilic fasciitis is also rare, and only a few cases have been reported including vitiligo-like hypopigmentation.[5] Whether hematological malignancy is associated with eosinophilic fasciitis or environmental factors is uncertain, however, our rare case demonstrates that diverse hematological as well as immunological manifestations can occur in association with eosinophilic fasciitis.

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Eosinophilic fasciitis with severe joint contracture in a patient with bladder cancer and B-cell lymphoma

Dear Editor,

An 81-year-old man was referred to our department, complaining of skin thickening of the extremities and trunk, which had progressed during the previous 10 months. He had undergone an operation for bladder cancer 3 years previously. Furthermore, he had been diagnosed with marginal zone B-cell lymphoma 8 months previously, and treated with chemotherapy using rituximab (four times) and prednisolone (20 mg/day with tapering for 3 months) which were ineffective for the skin symptoms. Physical examination showed severe hardening of the skin of the lower extremities and the trunk with brownish pigmentation. Keratosis was observed on the popliteal areas and dorsa of the feet. Severe joint contracture was seen on the lower limbs, which could not be extended (Fig. 1a). Neither sclerodactyly nor Raynaud's phenomenon was observed. Laboratory examination showed normal range of eosinophil subset, increased creatine kinase (1761 U/L), immunoglobulin G (3606 mg/dL) and positive antinuclear antibody (1:40, cytoplasmic), whereas neither anticentromere nor Topo-I antibodies were detected. T_2-weighted magnetic resonance images showed significant thickening with edema of the fascia of the thigh (Fig. 1b). A biopsy specimen taken from the thigh revealed extensive dermal sclerosis with thickened collagen bundles and deposition of homogenous materials, and thickened fascia (Fig. 1c). Not eosinophils, but lymphocytes and scattered plasma cells, were observed in the subcutaneous tissues. He was treated with half-dose steroid pulse therapy with methylprednisolone (500 mg/day) for 3 days, followed by 60 mg/day of prednisolone which was gradually tapered. One year later, skin sclerosis and joint contracture were sufficiently improved, and the lower legs could almost be fully extended (Fig. 1d).

Extensive skin induration of eosinophilic fasciitis can lead to joint contractures and tendon retraction, which reflect the severity of fascia fibrosis. A previous study showed that 29 among 52 patients had flexion contractures,[1] however, severe cases like ours are rare. Our patient also developed generalized skin hardening of the trunk, and his activities of daily living were much impaired by the disturbance of the range of excursion.

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