A 10-year old girl child presented with pain in the proximal part of all the four limbs, fever and skin lesions. There were also multiple, hyperkeratotic, flat papules present on the dorsum of the metacarpophalangeal and interphalangeal joints. On physical examination there was brownish maculopapular eruption over the extensor part of all the four limbs. Skin biopsy showed acanthosis, hyperkeratosis and perivascular inflammatory infiltrates. Laboratory evaluation revealed an elevated level of creatine kinase [320 u/l; normal (<200u/l)].

What are the skin lesions and what is the likely diagnosis?

Gottron's papules due to Juvenile dermatomyositis. It is an autoimmune connective tissue disorder characterized by inflammation of the muscles and the skin. Sometimes patient with juvenile dermatomyositis present without the involvement of muscle. This condition is known as amyopathic dermatomyositis. (1) In such cases, usually the diagnosis is clinched by the presence of skin lesions like gottron’s papules. Gottron’s papule, named after Heinrich Adolf Gottron (1890-1974), a German dermatologist, is an erythematous, lacy, pink to violaceous, macular eruption occurring in symmetric fashion over the dorsal aspect of metacarpophalangeal and interphalangeal joints, elbow, patella and medial malleoli. (2) It is pathognomonic sign of juvenile dermatomyositis. (1,2) Gottron’s papule can mimic psoriasis. Other skin lesion include heliotrope rash on the upper eyelids and shawl sign or “V” sign (diffuse erythematous lesion over the back and shoulder or in a “V” over the posterior part of neck and back or chest). (1,2) The treatment modality includes steroids like prednisone and methylprednisolone and in severe cases methotrexate.

References