Dermatological Quiz

Dr. Ka-ho LAU

MBBS(HK), FRCP(Glasg), FHKCP, FHKAM(Med)
Yaumatei Dermatology Clinic, Social Hygiene Service

Dr. Ka-ho LAU

Lesions on dorsum of right hand

This 50-year-old female teacher had three months' history of this slightly itchy skin rash on the dorsum of both of her hands and fingers (Figure). She also has similar itchy rash on her face, to which her family doctors prescribed with topical steroids. It seemed to calm down her rash partially. In the last three months, she felt increasingly unwell with aches and pain in the limbs, as well as difficulty in climbing stairs to her classroom at work. In addition, she noticed a marked weight loss recently.

Questions:

1. Name the physical signs shown in the clinical photo. What is your provisional diagnosis?
2. How will you confirm your clinical diagnosis?
3. How will you manage this woman?

Answer to Dermatological Quiz

1. There are multiple erythematous violaceous lichenoid papules confluence into poikilodermatous patches and plaques at the knuckles of the hands and dorsum of the fingers in this middle age woman. These are often referred to as Gottron's papules. The presence of periungual erythema, telangiectasia and cuticular infarct are also very useful cutaneous clues to the diagnosis of an underlying connective tissue disease. In this patient, coupled with the history of facial rash with similar violaceous heliotrope nature and symptoms suggestive of proximal myopathy, a clinical diagnosis of dermatomyositis should be considered.

2. Skin biopsy of lesional skin shows interphase dermatitis with basal vacuolar degeneration at the epidermis. The basement membrane is thickened by mucin deposition. The component of myositis, as evidenced by proximal muscle weakness on physical examination, can be confirmed by the elevated muscle enzymes. Further investigations with electromyography, MRI and muscle biopsy, if necessary, may show myositic/ myopathic changes.

3. Late onset dermatomyositis, as in our patient, is reported to have a 6.5 fold increase in risk of internal malignancy. The reported frequency of internal malignancy in adult dermatomyositis varies from less than 10% to over 50%. Commonly associated malignancies in local patients include nasopharyngeal carcinoma (commonest), breast, lung, stomach and other female genital cancers. The approach in managing adult late onset dermatomyositis is thorough malignancy screening upon diagnosis and detailed laboratory evaluation as directed by clinical finding. Systemic steroid is the first line treatment for dermatomyositis, especially when myositic component of the disease is prominent. Adjunctive systemic treatment such as antimalarial or low dose methotrexate may also be helpful. Significant resolution of dermatomyositis after treatment of associated malignancy is seen, while relapse of cutaneous disease may herald relapse of underlying malignancy.

Dr. Ka-ho LAU

MBBS(HK), FRCP(Glasg), FHKCP, FHKAM(Med)
Yaumatei Dermatology Clinic, Social Hygiene Service