Serositis and desquamation of fingers and toes

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DESCRIPTION
A 19-year-old male patient presented with painful skin lesions on his hands, feet and face with concurrent central sharp chest pain.

This chest pain was familiar and had occurred and subsided 3 months prior. At that time, a diagnosis of acute pericarditis had been applied. In the interim, the patient had lost weight, experiencing mouth ulcers and arthralgia of the small joints of the hands, wrists and ankles.

Clinical examination was remarkable for desquamation of the fingertips and feet, digital infarcts and erythematous lesions on the lips, eyelids and ears (figures 1 and 2). Urine dipstick was negative for blood and protein.

A transthoracic echocardiogram (figure 3 and videos 1 and 2) demonstrated pericardial and pleural effusions, with normal valves.

His blood tests demonstrated microcytic anaemia and lymphopenia. Ferritin levels were elevated with low serum iron and folate levels. Inflammatory markers were raised with erythrocyte sedimentation rate 55 mm/h (normal range 1–12 mm/h), C reactive protein 28 mg/L and reduced levels of complement. A direct agglutination test was positive indicating haemolytic anaemia.

Serological investigations showed a strong positive titre antinuclear antibody >1:2560 and positive double-stranded DNA 314 iu/mL.

Figure 1  (A) Right and (B) left hands; (C) right and (D) left toes; (E) right and (F) left soles of feet. All panels showing digital infarcts and cutaneous vasculitis.

Figure 2  (A) Perioral erythematous skin lesions. (B) Mouth ulcers.

Figure 3  Transthoracic echocardiogram image in parasternal long-axis view showing pericardial and pleural effusions.
Coxsackie viral serology and multiple blood cultures were negative.

A diagnosis of systemic lupus erythematosus (SLE) was made and methylprednisolone was started with good clinical response. The patient was transitioned onto hydroxychloroquine after 2 months, with substantial improvement in skin lesions and serositis.

SLE involves the skin in up to 85%,\(^1\) with a variety of cutaneous manifestations, some more common than others.

**Learning points**

- Systemic lupus erythematosus is an autoimmune disorder that involves the skin in up to 85%, though in a variety of different forms.
- The discovery of a vasculitic rash warrants consideration of numerous differential diagnoses, broadly divided into: drug-induced, infectious, autoimmune and malignant causes.
- Medical photography is a valuable tool in the assessment and monitoring of new skin lesions.

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**Contributors**

ADS collected the images and wrote the article. RA assisted in writing the initial manuscript and arranged medical photography of the patient. RG provided critical review and editing of the final manuscript.

**Competing interests**

None.

**Patient consent**

Obtained.

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**REFERENCE**