LATENT TUBERCULOSIS REVEALED BY AN ERYTHEMA NODOSUM : AN UNUSUAL DISCOVERY

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Background and Aims :

Erythema nodosum (EN) is a skin condition where red lumps appear on the shins and less commonly forearms and thighs. This is a painful disorder of the subcutaneous fat that can manifest with tender, erythematous, subcutaneous nodules. It is often the manifestation of a systemic disease, such as I tuberculous infection (MTI).

Case report :

A 9-years-old boy was admitted for erythema nodosum in both legs that appeared three days ago.

The patient did not report any other symptoms as fever, fatigue, weight loss, dysuria and cough.

There was no significant past medical history. He was not taking any prescribed or over the counter medication.

On examination, cardiovascular and respiratory examination was normal. There was no lymphadenopathy or hepatosplenomegaly. Both legs were red, hot, swollen.

The nodules were poorly demarcated, 2–4 cm in diameter and they were erythematous and painful (Fig.1)l.

The chest radiography was normal . Laboratory tests revealed a normal blood count, Erythrocyte sedimentation rate (ESR) was 10 mm at the first hour, CRP, rheumatoid factor and ASLO titre were normal. Thyroid function tests (FT4, TSH) were within normal range. Autoantibodies (rheumatoid factor, anti-DNA) were negative. TST reaction was 24 mm with blistering after 72 hours (Fig. 2).

Investigation of mycobacteria by gastric tubing, sputum and urine: negative direct examination

Discussion :

- Erythema nodosum is a well-known delayed hypersensitivity reaction to a variety of different stimuli such as infections, autoimmune diseases or drugs, depending on the country of the patient's origin.
- incidence is ~1–5 per 100 000 persons
- The association of erythema nodosum with tuberculosis is well known, especially in endemic regions like Tunisia
- Some series reported TB as the second most common cause of secondary erythema nodosum
- thers consider Mycobacterium tuberculosis infection as a rare cause.
- EN has also been described in patients with markedly positive TST reactions in the absence of any detectable focus of TB infection like our case.
- For these reasons, all patients with erythema nodosum should be stratified by risk for tuberculosis exposure.
- When it comes to treatment strategy there is an ongoing discussion on whether the demonstration of MTI and EN should be treated as active TB (combination schemes) or as latent TB with preventive monotherapy.
- In our patient, IDR. was 24 mm with blistering , meaning contact with mycobacterium tuberculosis makes the diagnosis of a plausible MTI .
- The absence of other clinical signs of tuberculosis other than EN makes the diagnosis questionable and poses a therapeutic dilemma.

Fig.1: Erythema nodosum

Fig.2: TST reaction with blistering

Conclusion :

The manifestation of erythema nodosum secondary to TB infection remains a challenge for health professionals as correct diagnosis of the primary aetiology has important therapeutic implications for the patients and screening for close contacts.