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Subcutaneous panniculitis-like T- cell lymphoma – a diagnostic challenge

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INTRODUCTION

Subcutaneous panniculitis-like T- cell lymphoma (SPLT) is a rare indolent entity, constituted predominantly by alpha-beta cytotoxic T-cells. Its main differential diagnosis is lupus erythematosus panniculitis (LEP), due to the significant overlap of clinical and histological findings. SPLT has a higher morbidity and risk for hemophagocytic syndrome (which may affect 15-20% of the patients), highlighting the importance of the correct diagnosis.

CASE REPORT

A female, 38 years old patient started presenting 8 years ago erythematous spots on the face, back and upper limbs, which evolved with lipodystrophy. Antinuclear antibody was positive 1:80 nuclear fine speckled and homogeneous nucleolar patterns . Patient reported a previous use of methotrexate and prednisone, without response. Histology demonstrated septal and predominantly lobular infiltration of lymphocytes, plasma cells and histiocytes on the hypodermis. There was nuclear hyperchromasia of the lymphocytes and adipocyte rimming. At immuno-histochemistry, more than 90% of the lymphoid infiltrate was CD3+, 20-40% of the cells were CD8+, Ki-67 was positive in 20-30% of the lymphocytes and CD4 marker was unavailable. The findings were compatible with subcutaneous panniculitis-like T-cell lymphoma (SPTL).

CLINICAL FINDINGS

Atrophic plaques on the dorsum, jaw, arm and leg.

HISTOLOGICAL FINDINGS

Fig1. Lobular panniculitis – lymph-histiocytic infiltrate on hypodermis.
Fig2. Lymphocytes rimming adipocytes. Pleomorphism, atypia and hyperchromasia are observed.

Figure 3. CD8+ immunostaining. Figure 4. Ki-67 index positivity of 30-40%

DISCUSSION

The diagnosis of SPTL is challenging, due to its clinical and histological similarities with LEP. SPTL presents as infiltrated plaques and/or multiple nodules, which after regression may evolve with lipoatrophy. At histology, SPTL presents as a lobular panniculitis which spares the interlobular septum, epidermis, and dermis. The presence of CD8+ lymphocytes with high Ki-67 index rimming individual adipocytes aids in its diagnosis, since these findings are not expected at LEP. Treatment is not standardized and may be based on the use of immunosuppressants (such as corticosteroids associated with methotrexate or cyclosporin) or chemotherapeutic agents.

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