

# Primary cutaneous aggressive epidermotropic CD8+ T-cell lymphoma: A rare cutaneous T-cell lymphoma

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## Introduction

- Primary cutaneous CD8+ positive aggressive epidermotropic T-cell lymphoma is a rare and poorly characterized variant of cutaneous T-cell lymphoma.
- Historically, known as generalized pagetoid reticulosis or Ketrion-Goodman disease, is characterized by rapidly evolving and extensively ulcerated annular plaques.
- Prognosis is poor with rapid disease progression, poor response to chemotherapy and death often associated with complications of extensive epidermal necrosis and only rarely nodal or other extracutaneous involvement.

## Discussion

- Primary cutaneous aggressive epidermotropic cytotoxic T-cell lymphoma should be differentiated from mycosis fungoides, which also shows epidermotropism, but has an indolent course.
- It is defined clinically by the rapid onset of erosive or ulcerated plaques usually without preceding skin lesions (patch stage).
- There is immunophenotypic expression of CD8 and the  $\alpha\beta$  T-cell receptor heterodimer, along with an atypical pagetoid T-cell infiltrate with cytotoxic granules and absence of CD4 expression.
- Clinical course is aggressive, and the response to chemotherapy is often disappointing with median survival of less than two years.

## Conclusion

- This rare cutaneous T-cell lymphoma, though has been reported in case reports and case series, no definite diagnostic criteria have been established, and an optimum treatment is still awaiting.

## References

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- Nofal A, Abdel-Mawla MY, Assaf M, et al. Primary cutaneous aggressive epidermotropic CD8+ T-cell lymphoma: proposed diagnostic criteria and therapeutic evaluation. *J Am Acad Dermatol*. 2012;67:748–759.

## Case Report

### Clinical

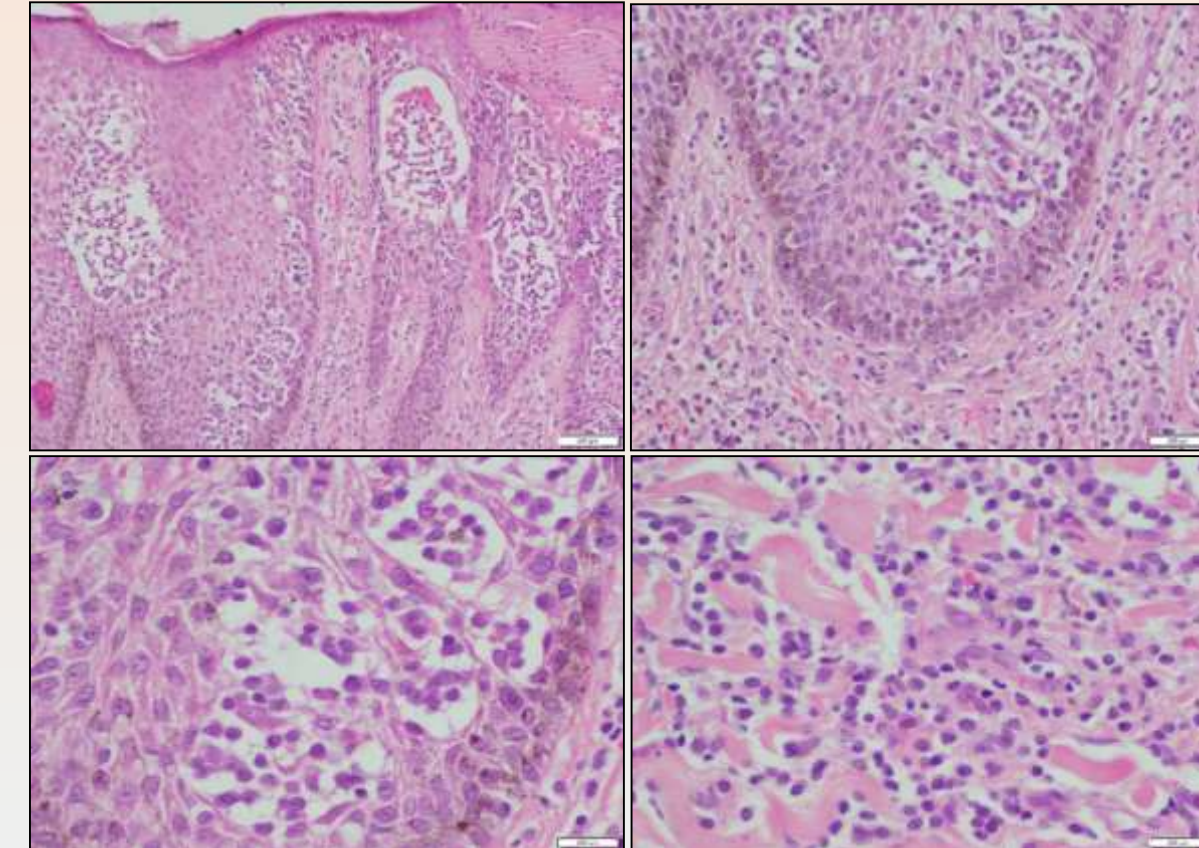


- A 47-year old man presented with multiple brown-colored plaques over his trunk and extremities.
- Onset was abrupt with rapid progression over 5-months.
- No history of systemic features, fever or weight-loss.
- Clinical examination- multiple dusky-erythematous to hyperpigmented plaques, few showing ulceration. Soles were predominantly involved with coalescent plaques and ulceration.
- There were no skin nodules, patches, lymphadenopathy or hepatosplenomegaly.
- Patient was treated with methotrexate (15-30 mg/week) for 2 months without much improvement, and was referred to oncology for further management.

### Laboratory Investigations

- CBC, LFT, RFT, LDH- normal
- Bone marrow examination - normal
- 18F-FDG whole body PET-CT- metabolically active cutaneous soft tissue nodules

### Histopathology



Irregular acanthosis with necrotic keratinocytes in upper layers of epidermis. Multiple collections of large lymphocytes with prominent nucleoli in the epidermis, forming abscess at few foci, suggestive of epidermotropism.

