

Rare skin tumor – primary cutaneous CD4+ small/medium T-cell lymphoproliferative disorder

Damian W. Trzos¹, Wojciech M. Wysocki^{1, 2, 3} 

¹Department of General and Oncological Surgery, 5th Military Clinical Hospital in Krakow, Krakow, Poland

²Chair of Surgery, Faculty of Medicine and Health Sciences, Andrzej Frycz Modrzewski Krakow University, Krakow, Poland

³Maria Skłodowska-Curie National Research Institute of Oncology, Warsaw, Poland



Figure 1. Patient's nodular lesion on the forehead

Primary cutaneous CD4+ small/medium T-cell lymphoproliferative disorder (PCS-TCLPD) is a rare disease with no clear diagnostic and treatment guidelines [1]. According to the WHO classification of hematopoietic neoplasms, this is an indolent T-cell lymphoproliferative disorder confined to the skin, with a characteristic population of T cells with a follicular T-helper phenotype [2]. So far, this poorly defined disease has an undetermined malignant potential [3].

We present a case report of a 46-years-old Caucasian male who presented with a flat circular erythematous skin lesion on

his forehead (fig. 1). The lesion was excised and histopathology revealed a skin covered with epithelium without atypia, massive lymphocytic infiltration extending into the subcutaneous tissue. There was perivascular infiltration and infiltration of skin appendages; CD3+ T cells predominate the lesion; CD4+ significantly predominate over CD8-/+ , CD30-. The image most closely matched PCS-TCLPD.

PCS-TCLPD has no long-term risk of secondary lymphomas and an excellent prognosis. It has an indolent clinical behavior with a 5-year survival rate of 100% [1, 2]. Imaging modalities and bone marrow evaluations are of a relatively low diagnostic value and are not mandatory [1]. Local surgical treatment can be used with a high degree of success and should be considered before other options [1]. In summary, PCS-TCLPD is a rare disease, usually presenting as a plaque or nodule in the head and neck region and can be treated successfully by simple surgical excision with clear margins [3].

References

1. Besch-Stokes JG, Costello CM, Severson KJ, et al. Primary cutaneous CD4 small/medium T-cell lymphoproliferative disorder: Diagnosis and management. *J Am Acad Dermatol.* 2022;86(5): 1167–1169, doi: 10.1016/j.jaad.2021.04.067, indexed in Pubmed: 33915243.
2. Gru AA, Wick MR, Eid M. Primary cutaneous CD4+ small/medium T-cell lymphoproliferative disorder-clinical and histopathologic features, differential diagnosis, and treatment. *Semin Cutan Med Surg.* 2018; 37(1): 39–48, doi: 10.12788/j.sder.2018.006, indexed in Pubmed: 29719019.
3. Surmanowicz P, Doherty S, Sivanand A, et al. The Clinical Spectrum of Primary Cutaneous CD4+ Small/Medium-Sized Pleomorphic T-Cell Lymphoproliferative Disorder: An Updated Systematic Literature Review and Case Series. *Dermatology.* 2021; 237(4): 618–628, doi: 10.1159/000511473, indexed in Pubmed: 33326960.

Jak cytować / How to cite:

Trzos DW, Wysocki WM. *Rare skin tumor – primary cutaneous CD4+ small/medium T-cell lymphoproliferative disorder.* NOWOTWORY J Oncol 2023; 73: 256.