A 77-year-old man developed interstitial granuloma during treatment with interferon-γ for mycosis fungoides. The man presented to a hospital with a 2-month history of erythroderma. Based on the findings, he was diagnosed with an erythrodermic variant mycosis fungoides. He received a combination of interferon-γ $5 \times 10^5$ U/day for five times a week for 1 week and $7.5 \times 10^5$ U/day five times a week for the next week [route not stated] and radiation with narrowband UVB [nbUVB]. Two weeks following the treatment, a skin biopsy showed an interstitial array of lymphocytes and histiocytes among collagen bundles, namely interstitial granuloma. Alcian blue staining revealed a slight elevation in mucin. His erythroderma and pruritus was initially improved, but 4 months following the first combination therapy, the erythroderma reappeared. Skin biopsy revealed infiltration of atypical lymphocytes in the papillary dermis and interstitial granuloma, without atypical cells in the deep dermis. Immunohistochemistry was positive for CD4, CD8 and CXCR3 lymphocytes in the dermis with predominant CD8-positive cells. Elastic van Gieson (EVG) staining revealed a reduction in number of elastic fibers. He received second cycle of combination therapy of interferon-gamma and nbUVB, due to deterioration of the mycosis fungoides. One week later, the pruritus and erythroderma was improved, but new papules were noted on the trunk at that time. Biopsy of a papule revealed multiple foci of nodular granulomas with peripheral interstitial granuloma and disappearance of atypical lymphocytes in the papillary dermis. The EVG staining showed vanishment of elastic fibers around the granuloma. Hence, a diagnosis of interstitial granuloma related to interferon-γ was established.

Goto H, et al. Interstitial granuloma after interferon-gamma and narrowband UVB therapy in a patient with mycosis fungoides: Immunological and histopathological considerations. Journal of Cutaneous Pathology 48: 689-693, No. 5, May 2021. Available from: URL: http://doi.org/10.1111/cup.13960