SKIN MANIFESTATIONS OF INTERNAL DISEASE

NECROBIOSIS LIPOIDICA BEYOND DIABETICORUM: A MULTI-INSTITUTION EVALUATION OF THE CLINICAL FEATURES AND COMORBIDITIES OF 236 PATIENTS

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Introduction: Necrobiosis lipoidica is a granulomatous condition that classically presents with atrophic plaques on the lower extremities. Few studies have systematically analyzed this rare entity.

Objective: We sought to evaluate the epidemiology, clinical features, and disease associations of necrobiosis lipoidica.

Materials and Methods: We retrospectively reviewed medical records of patients with necrobiosis lipoidica who presented to the University of Pennsylvania between 2008 and 2018 and to the Brigham and Women's Hospital, Massachusetts General Hospital, and the University of Iowa between 2000 and 2018.

Results: We identified 236 patients with necrobiosis lipoidica. The mean (± SD) age was 47 (16) years and 200/236 (85%) patients were female. 225/230 (98%) patients had lesions on the lower legs. 73/226 (32%) patients had a single lesion, while 153/226 (68%) had multiple lesions. 138/236 (58%) patients had diabetes mellitus: 49 (36%) type 1, 78 (57%) type 2, and 11 (8%) of unspecified type. The mean (± SD) hemoglobin A1c in patients with diabetes mellitus was 8.25 (1.77). These patients were more likely to present at an earlier age (43 versus 50 years, p = 0.002), less likely to be female (81% versus 91%, p = 0.046), and more likely to have ulceration (17% versus 7%, p = 0.034). Of 184 patients with a documented body mass index, 95 (52%) were obese. The mean (± SD) body mass index was 32.5 (9.3). 104/231 (45%) patients had hypertension, 98/223 (44%) had dyslipidemia, and 56/233 (24%) had thyroid disease.

Conclusions: Necrobiosis lipoidica patients with diabetes mellitus were more likely to present at an earlier age, less likely to be female, and more likely to have ulceration than those without diabetes mellitus. Other comorbidities were obesity, hypertension, dyslipidemia, and thyroid disease. These associations, which have limited quantification in the literature, merit further exploration.