

Generalized Granuloma Annulare and Non-Hodgkin's Lymphoma

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Accepted Aug 28, 2012; Epub ahead of print Dec 18, 2012

Granuloma annulare (GA) is a common, inflammatory disorder, which is usually considered to have a benign progression. The generalized variant of GA is relatively rare and has been reported in association with diabetes, HIV and some malignant neoplasias, such as breast, cervical, lung, prostate, stomach and ovarian carcinoma. In particular, the relatively rare association of generalized GA with malignant lymphomas is not well-recognized. We describe here the presence of both generalized GA and Hodgkin's disease (HD) in a 64-year-old woman.

CASE REPORT

A 64-year-old woman presented to our dermatology department with a 3-month history of multiple, skin-coloured papules, several of which had an annular morphology (Fig. 1 A, B). These lesions were localized on the head, neck, chest, upper extremities and the dorsal surface of the hands. A skin biopsy of a chest lesion demonstrated a focal degeneration of dermal collagen surrounded by an infiltrate of mainly histiocytes with

some lymphocytes (Fig. 1C), confirming the diagnosis of annular granuloma (GA). Given the extension of the lesions, a diagnosis of generalized GA was made. Complete blood count with differential demonstrated anaemia (9.5 g/dl) and 3% abnormal lymphocytes. A chemistry panel showed a high level of lactate dehydrogenase (LDH) (562 IU/l; normal levels: 269–476 IU/l). The patient also reported that she felt weak and exhibited a weight loss of more than 10% in the last 3 months. Clinical examination revealed that her cervical and right axillary lymph nodes were enlarged. An abdominal ultrasound demonstrated splenomegaly. Both of these aforementioned findings were confirmed by computed tomography (CT) scan. A haematology consultation led to a lymph node biopsy in the axillary region. The histology showed a nodular pattern of growth reminiscent of germinal centres; hence a diagnosis of grade 3 non-Hodgkin's-diffuse follicular centre lymphoma was made (according to the World Health Organization (WHO) and Ann-Arbor classification). The patient was started on a combination multi-agent chemotherapy (cyclophosphamide, doxorubicin, vincristine, prednisone) and rituximab (R-CHOP) for 8 months. However, due to progressive and rapid clinical deterioration, the patient died one year later.

DISCUSSION

GA is an inflammatory disorder, which is usually considered to have a benign progression. Its clinical variants are classified as localized, generalized, nodular, perforating and subcutaneous. Generalized (or disseminated) GA is thought to account for approximately 15% of cases of GA, and has been reported in association with diabetes, HIV and some malignant neoplasias, such as breast, cervical, lung, prostate, stomach and ovarian carcinoma (1). Generalized GA lesions in conjunction with malignant lymphomas seem to be a very rare and not well-recognized association (2). To our knowledge, the association of generalized GA with Hodgkin's disease (HD) has been reported previously in only 7 patients (3, 4). It is speculated that GA results from an immunological reaction stimulated by an as-yet unidentified tumour antigen.

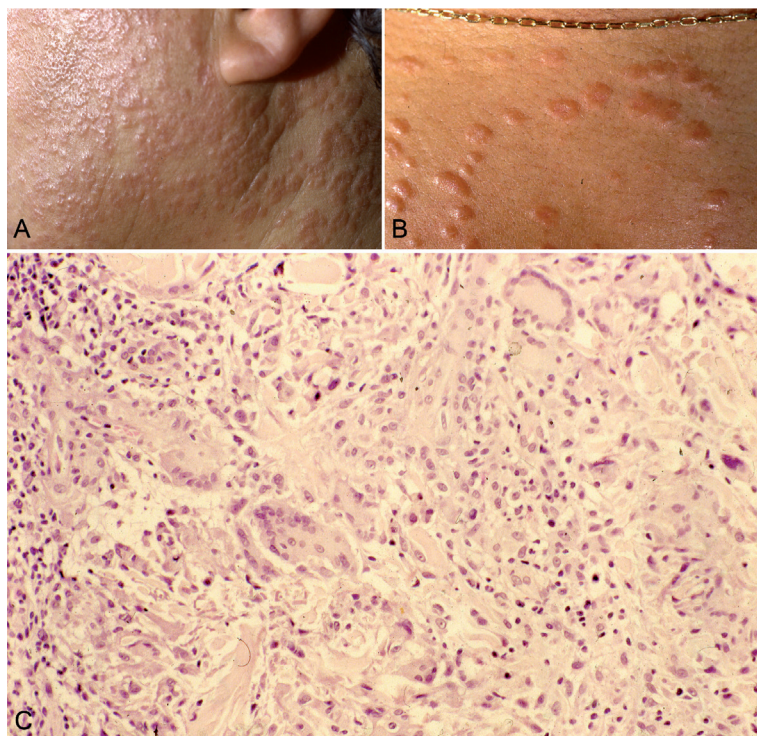


Fig. 1. Generalized granuloma annulare (GA). Multiple skin-coloured papules, several of which had an annular formation, on (A) the head and neck region, and (B) the upper chest. (C) Focal degeneration of dermal collagen surrounded by an infiltrate of mainly histiocytes with some lymphocytes (haematoxylin & eosin, original magnification, $\times 40$).

We agree with the recent description of Cohen (5), who used the term “malignancy-associated GA”. Dermatologists should be aware of this association and refer patients to a haematologist or an oncologist for appropriate work-up, especially in cases with rapid physical decay associated with generalized GA.

The authors declare no conflicts of interest.

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