revealed that his pain and swelling had markedly improved and the lesions on his palm had resolved.

Chilblain-like lesions in COVID-19 have been reported to present asymmetrically as erythematous to violaceous macules, papules, or plaques at acral regions and may be associated with swelling or blistering. The lesions affect the feet more than the hands, tend to affect young patients with milder symptoms, and seem to occur later in the course of COVID-19 disease [1]. Our patient's presentation was consistent with these characteristics. Histopathology of COVID-19-associated chilblain-like lesions was reported to consist of a superficial and deep perivascular lymphocytic infiltrate with mild basal-vacuolar alteration, consistent with idiopathic chilblains. Other reported features include papillary dermal oedema, erythrocyte extravasation, dermal mucin deposition, and deep vessel thrombi [5].

As idiopathic chilblains rarely occur in environments with high temperature, physicians encountering such an eruption should consider the possibility of underlying COVID-19 disease during this pandemic. ■

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Atrophic annular papules and plaques in an elderly patient

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A 79-year-old man with a personal history of diabetes mellitus presented with a six-month history of asymptomatic cutaneous lesions that had started on the elbows and knees with progression to the lumbar and abdominal area. The patient had applied only emollients, and no new medication had been introduced. The patient did not refer to any other mucocutaneous or systemic symptoms, sun exposure or photosensitivity. On clinical examination, polycyclic annular plaques with an atrophic centre and well-defined borders, symmetrically distributed on elbows, knees and trunk (*figure 1A*), were observed. Total remission was obtained after 8-10 months of follow-up without pharmacological intervention, but with sun avoidance.

Histopathological studies showed a preserved epidermis with a granulomatous inflammatory infiltrate in the papilar and superficial reticular dermis (*figure 1B*). Multiple giant multinucleated cells were observed in the dermis (*figure 1C*), associated with elastolysis and elastophagocytosis, also demonstrated using orcein stain (*figure 1D*). Annular elastolytic giant cell granuloma (AEGCG) was diagnosed.

AEGCG is an uncommon granulomatous skin disease, which typically occurs in middle-aged patients [1] and in both sexes equally. Although its pathogenesis remains unclear, it is though that factors such as ultraviolet radiation [2], heat and others [3] might change the antigenicity of these fibres and contribute to the inflammatory reaction and posterior elastolysis [2, 3]. When this condition affects sun-exposed skin, it is termed "actinic granuloma" [4]. Whether AEGCG should be considered as a separate entity or a subtype of granuloma annulare (GA) is a matter of debate [5]. Apart from the skin, cases of eye or multisystemic involvement have been described, which differentiate AEGCG from GA [6]. Although diabetes mellitus was not initially related to this condition, it has been found to be more common in patients with AEGCG, as in the present clinical case. There are few reports describing an association between AEGCG and malignancies [3, 5], including haematological disorders and solid neoplasms.

AEGCG is characterized clinically by polycyclic and annular papules and plaques with raised and well defined erythematous borders that grow centrifugally, leaving an atrophic centre [4]. Lesions can grow up to several centimetres and the atrophic part can also show hypopigmentation. These lesions are usually asymptomatic, but some patients complain of pruritus or a burning sensation [5]. Four variants of this condition have been described [6] and can be present simultaneously in the same patient: popular, reticular, localized and generalized forms. The condition usually lasts for months or years, when new lesions may appear, but spontaneous remission occurs in the majority of patients [2].

Histopathologically, AEGCG demonstrates an interstitial inflammatory infiltrate in the dermis, mainly composed of histiocytes, some in a giant multinuclear cell configuration, with lymphocytes and other inflammatory cells [1-3]. No palisading granuloma configuration is usually found. Necrobiosis and mucine deposition are also absent. Giant cells may be found to be digesting elastic fibres (elastophagocytosis), which can be observed in preparations with orcein stain, in which an absence or scant numbers of well-configured fibres can be seen along with fragmentation (elastolysis) [3-5]. As lesions have an annular configuration, the clinically active border correlates to the inflammatory granulomatous infiltrate with giant multinucleated cells and elastophagocytosis, whereas the

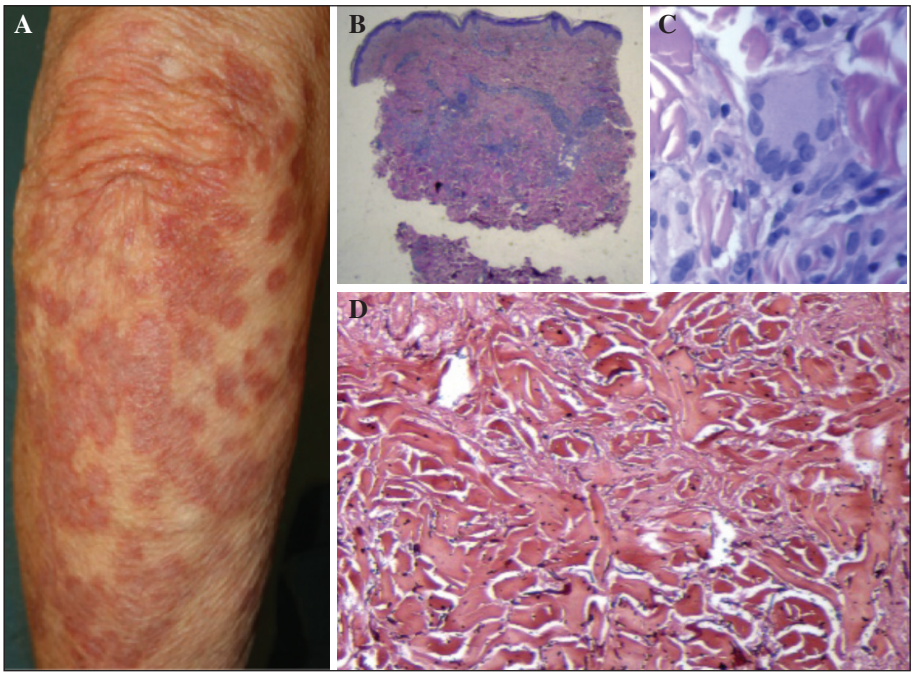

Figure 1. **A**) Polycyclic and annular plaques with raised, well defined erythematous borders and an atrophic centre. **B**) Perivascular and interstitial dermal inflammatory infiltrate (H&E; x10). **C**) Giant multinucleate cell and histiocytes around dermal fibres (H&E; x400). **D**) Low density of elastic fibres with elastolysis and elastophagocytosis (orcein stain).

atrophic centre shows minimal inflammatory cells but prominent elastolysis and absent fibres [4].

For differential diagnosis, one should consider granulomatous slack skin [2] (involving an inflammatory granulomatous infiltrate surrounded by atypical lymphocytes), mid-dermal elastolysis [1, 2] (plaques of atrophic skin with fine wrinkles on the surface) and anetoderma [4] (multiple round plaques with macular atrophy and palpable depression due to lack of elastic tissue in the dermis). Clinically, many other conditions, such as necrobiosis lipoidica or annular lichen planus, can resemble AEGCG [4]. For this reason, histopathological examination remains the gold standard for the diagnosis of this condition [4, 5].

Although different treatment modalities have been used with variable results, spontaneous remission of AEGCG may occur, making the assessment of the efficacy of any treatment difficult. Topical and intralesional corticosteroids, phototherapy, topical calcineurin inhibitors, classic immunosuppressors, acitretin/isotretinoin, hydroxichloroquine and chloroquine, as well as many other treatments have been reported [4]. As UV light is thought to be the main causal factor, patients should avoid sun exposure [1-5].

In conclusion, we present a case of AEGCG with characteristic clinical and histopathological features with spontaneous remission without treatment. AEGCG is an uncommon skin disorder that may be associated with systemic diseases, although diabetes mellitus and malignant neoplasms may generally be excluded [3, 5]. ■

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