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LETTER TO THE EDITOR

## [Translated article] How Should We Write Grenz Zone?

## ¿Cómo escribir «zona Grenz» correctamente?

## To the Director,

Although dermatopathologists are clear about what the Grenz area is, there is a significant discrepancy in how to correctly refer to this area. Thus, in the literature, two main terms can be found: "grenz zone"' (in lowercase) or "Grenz zone"' (in uppercase).

This expression refers to the space between the epidermis and a dermal infiltrate (tumoral or inflammatory) that does not reach the epidermis. Although it was initially described in granuloma faciale, ${ }^{1}$ it can be present in other diseases such as lymphoid hyperplasia, erythema elevatum diutinum, infections such as leprosy, leishmaniasis, lobomycosis, post-kala-azar, and tumors such as dermatofibroma, Langerhans cell histiocytosis, cutaneous lymphomas (mainly B-cell), or leukemia cutis. ${ }^{1}$

The origin of the word "Grenze" dates back to the 18th century, referring to the Grenzers, a group of troops stationed along the Croatian and Transylvanian borders during the Habsburg Monarchy. ${ }^{2}$ The name, derived from the German word "border," reflects its geographical origin. ${ }^{2}$

The usage of the term "grenz zone"' as a medical term is linked to the initial histological descriptions of facial granuloma. The first clinical depiction of a facial granuloma was provided by Hutchinson in 1878, who referred to it as "symmetrical purple congestion of the skin in patches, with induration., ${ }^{3}$ The inaugural histological characterization of what is now considered a facial granuloma was conducted by Wigley in $1945 .{ }^{4}$ However, Wigley did not make reference to the subepidermal band commonly observed in facial granuloma. It was Buley in 1946 who accurately delineated this band: "Separated from the epidermis by a narrow zone of connective tissue was a wide horizontal band of a cellular infiltrate." Nonetheless, Buley did not coin the term "the Grenz zone." ${ }^{5}$

[^0]In 1947, Lever presented a case of facial granuloma, describing how an "extensive, extremely cellular infiltrate occupied the corium" and noting that "it was separated from the epidermis by a narrow rim of normal connective tissue.' However, like his predecessors, Lever did not employ the term "grenz zone." ${ }^{6}$ In a subsequent case presentation in 1950, Lever again discussed the same entity but did not utilize the expression "Grenz zone"' either."

In 1951, at the meeting of the Detroit Dermatological Society, Donald Boersma from Michigan presented a case of facial granuloma with eosinophilia (granuloma faciale). ${ }^{1}$ In the histological description, there was no reference made to the subepidermal band.

In 1952, Samuel Peck, Laurence L. Palitz, and Ellen Reiner published two cases of facial granuloma with eosinophilia (granuloma faciale). ${ }^{8}$ In their article, they consistently used the expression "grenz zone" (always with a small ' $g$ ') to refer to the spared subepidermal band. They stated that "Invariably there is a grenz zone of normal complexion directly below the epidermis.' In the legend of their Figure 2, for example, they described the "grenz zone of normal complexion." Also, in the legend of their Figure 4, it can be read: "there is a small grenz zone of normal complexion."

The construction of the expression "grenz zone" from the German word "Grenzers" involves the German word "Grenze," which, with a capital "G" and ending in "e,"' means border. In German, nouns are capitalized. The expression "'Grenz," as a standalone term, does not exist in the German language. However, the term "Grenze"' can lose the "e" when combined with another word, as seen in "Grenzkontrolle" for "border control." Similarly, "border zone" would be called "Grenzzone"' in German (written together and with a capital "G').

The transformation of "Grenzzone" into "grenz zone" likely reflects an "Anglo-Saxonizing"' of the term, resulting in the separation of the German compound word into two words in English, with the first word in lowercase ("grenz") and the second word ('zone'") maintaining its original form.

If the goal is to maintain the etymological spirit of the term, staying true to the German origin, then "Grenze zone"' would indeed be more accurate, with "'Grenze"' written with a capital "G" and ending in "e." This approach aligns with the original noun in German.

On the other hand, if the intention is to pay tribute to the publication of Peck, Palitz, and Reiner and follow the convention they established, then using "grenz zone"' (with
a lowercase " $g$ "') is indicated. This choice respects the terminology introduced by these authors and recognizes the historical context in which the term gained prominence.

Ultimately, the decision may depend on the specific context, audience, and purpose, considering both the etymological roots and the historical usage of the term in medical literature.

However, the Americanization of the German term seems to be already consolidated in the literature and appears as such in all texts. Despite this, there are variations on whether "Grenz" should be written with a capital or lowercase " G ," and periodically, this debate arises at conferences and meetings, as well as the (more or less accurate) discussion about the origin of the term. Therefore, knowledge of its origin and grammar is always appropriate.

In my opinion, the term "grenz zone"' is well established in the medical literature and will not be modified. There is also no benefit in attempting to impose one of the two modalities (lowercase or uppercase) as the correct one. In conclusion, the purpose of this article is more explanatory and informative than corrective.

## Conflicts of interest

None declared.

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[^0]:    DOI of original article:
    https://doi.org/10.1016/j.ad.2023.06.020

