

A review targeting a result is a bias itself

Dear Editors,

With interest, I read the recent publication of a review article entitled: *Neuralgia-inducing cavitational osteonecrosis—A systematic review* by Sekundo et al. (Accepted April 15, 2021; <https://doi.org/10.1111/odi.13886>). It is important to note that none of the authors has done their own scientific work on, or published in, this field previously.

The first time I came into contact with this pathogenic entity was in the early 80s, when 70 cases of NICO had been presented at a meeting in Stockholm. The clinical term of NICO had been chosen at that time as all patients known until then had been suffering from neuralgic symptoms, which we recognize today is not necessarily the case. Over time, knowledge about the clinical symptoms of this pathogenic state has expanded and become more complex. The typical pathomorphology with the fatty necrotic tissue, bone marrow edema, and the loss of the spongiosa of the jawbone had been recognized already then since it could be seen during surgical treatment and afterward in the pathohistology. So, we do not have to discuss that point as it is accepted and in many papers published. More than 50 quoting of Lechner's articles in international literature confirm this.

The terminus fatty degenerative osteonecrosis of the jawbone (FDOJ) meanwhile is preferred. Similar cases of osteonecrosis of the hip including marrow edema have been described. What was surprising in those early cases presented at Stockholm was that only one of the seventy cases showed discrete pathologic findings in the radiogram. No specific pathologic laboratory marker had been detected at that time.

So the question was, can we find a medical imaging technique showing a strong correlation to the clinical and histopathological findings we know, and/or can we find a laboratory marker having a similar strong correlation. It is a normal scientific process that new methods may not be validated when described for the first time. The process of validation can then be initiated, and other scientists may confirm or doubt the published data by their own results. Clinicians demand tools enabling the (nearly) unequivocal diagnosis of this pathogenic entity prior to surgery to avoid not necessary surgical interventions. Over decades, I have been such a cooperating clinician. After several decades of research, two interesting diagnostic tools have become available: an imaging technique—transalveolar ultrasound, and a laboratory marker—analysis of RANTES/CCL5, both easy to implement.

All those who deal with this pathognomonic entity of FDOJ come to the same results of pathomorphology and pathohistology. Nevertheless, the authors of that article conclude that “no gold standard could be identified” and they fail to differentiate between the specific diagnostic of the entity and diagnostics of the accompanying

broad symptomatology. That strongly suggests a biased paper with the goal to discredit J. Lechner's work from the beginning. As far as we see now, surgery of the jaw will not solve all the problems patients have. But, it will be important to document the clinical aspect, the pathohistology, and to remove the damaged substrate of the tissue. So it is and will stay the most important diagnostic step and the first step of therapy. As systemic symptoms exist in those patients with a long history of their disease, cooperation of dentistry with other medical disciplines will be necessary. A constructive, open-minded scientific discussion geared toward optimizing solutions will be the best ensure steady progress in this field of medicine.

Sincerely, yours

Dr. Kurt E. Müller

KEYWORDS

systematic review, NICO, FDOJ, pathomorphology, pathohistology

AUTHOR CONTRIBUTIONS

Kurt E. Müller: Conceptualization; Methodology; Writing-original draft; Writing-review & editing.

PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1111/odi.13974>.

Kurt E. Müller

Dermatology, Occupational Dermatology, Clinical Environmental Medicine, Functional Medicine, Preventive Medicine, Dresden International University, Kempten, Germany

Correspondence

Kurt E. Müller, Dermatology, Occupational Dermatology, Clinical Environmental Medicine, Functional Medicine, Preventive Medicine, Dresden International University, Mozartstrasse 16, D-87435 Kempten, Germany.
Email: kurt.mueller@prevantamed.de

How to cite this article: Müller, K. E. (2022). A review targeting a result is a bias itself. *Oral Diseases*, 28, 1296–1296. <https://doi.org/10.1111/odi.13974>