

Peer Review Report

Review Report on Selected osteointegration markers in different timeframes after dental implantation: findings and prognostic value

Original Research, Acta Biochim. Pol.

Reviewer: Martyna Elas

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EVALUATION

Q 1 Please summarize the main findings of the study.

The authors describe several factors measured in patients undergoing the dental implants and show age-related differences.

Q 2 Please highlight the limitations and strengths.

No answer given.

Q 3 Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

No answer given.

Check List

Q 4 Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List)

Abstract: grammar in the sentence: „Revealed age-related features of the osteointegration in the post-implantation period...” should it not be “we revealed..”? and in the second half of the sentence there is no verb?

English needs correction throughout the text.

Methods, patients inclusion/exclusion: are factors such as cleaning the teeth before the PISF/GSF sampling; or diet (food or drink before the sampling) important for the results?

Results, line 119–120 and table 1. It took me some time to understand the first sentence about the lack of significant differences in GSF. Please reformulate the sentence, maybe use the whole “gingival crevicular fluid” phrase to make it more clear. Please describe in the text why GSF is not divided into conical and hexagonal groups and why are you showing the data in the figures at all? I think they should stay, but please comment why. Table 1 is also difficult to understand – there are 3 timepoints presented in the figures, so what does it mean “in the observation period”? What is F and P?

Figure captions should be self-explanatory and provide more information. Right now they contain a lot of abbreviations that a reader has to look for in the text.

Have you measured any other markers in GCF and PISF in the same group of patients with no differences?

Negative results, if you have any, should also be presented.

In the materials section the Authors appropriately describe the Griess method as a NO_x assay, whereas in the Results and later they jump to NO. Are there other possible sources of NO_x, like diet that should be included?

Results, line 175–176: “the mean values of NO content in PISF statistically insignificantly increased compared with the corresponding values in GCF only at the end (6-th month) after implantation” – wrong conclusion. The correct interpretation is they DID NOT CHANGE in the whole observation period. Correct also line 292! The conclusion that No comes from inflammation might be too strong – do you have any other inflammation indicators in these patients?

Q 5 ➤ Is the English language of sufficient quality?

No.

Q 6 ➤ Is the quality of the figures and tables satisfactory?

No.

Q 7 ➤ Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes.

Q 8 ➤ Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

Yes.

Q 9 ➤ Are the methods sufficiently documented to allow replication studies?

Yes.

Q 10 ➤ Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

No.

Q 11 ➤ Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Yes.

Q 12 ➤ Have standard biosecurity and institutional safety procedures been adhered to?

Yes.

QUALITY ASSESSMENT

Q 13 **Originality**

☒ ☐ ☐ ☐ ☐

Q 14 **Rigor**

Q 15 Significance to the field

Q 16 Interest to general audience

Q 17  **Quality of the writing**

Q 18 Overall quality of the study

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