Reviewer A

This review summarizes the pathogenesis and treatment of TMJOA in an easy-tounderstand manner. The evaluators determined that the following points could be improved to make this article publishable.

Comments to the authors:

In this manuscript, authors summarized the fundamentals of low- and high-inflammatory arthritis that affect the TMJs, including brief pathogenesis, symptoms, and treatment. Based on these, authors further considered indications and outcomes of alloplastic TMJ reconstruction.

The text is organized logically and clearly, while following points are a little confusing:

Thank you for feedback

Text format

In Line 61, 62, 83, 192, 212, it seems that there is no need to underline.

Removed the underline

In Line 323, the serial number "5" before "Conclusions" seems to be not required.

Removed

In Line 262, 283, the colons ":" should be deleted to keep consistent with the previous text.

I do not see them, may have been removed while reviewer editing

In Line 273, 274, 279, 280, "(p < 0.001)" or "(p.001)" was used. It's better to unify the format of these two types of description.

Changes made

Text content

In Line 73-76, authors described the TMJ-OA prevalence based on reference 1-2, which were reported on 1987 and 1966, respectively. Due to the development of diagnostic tools for TMJ-OA, it's better to add recent data and reports.

The data hasn't been replicated in exactly similar fashion. I have updated some data

In Line 124, authors described the term "Type A synovial cells", which seems to be semantic unclear. The description "Type A fibroblast-like synovial cells" is recommended.

Change made

In Line 123-125, authors described "...secondary to hyperplasia of Type A synovial cells.... Subsequently, a mononuclear cell infiltration occurs." In general, monocyte/macrophage, and lymphocyte (mononuclear cell) infiltration occurs prior to remarkable hyperplastic synovium, and the interactions of fibroblast-like synovial cells and immunocytes induce articular tissue damages. Second, "mononuclear cell" seems to be sematic unclear. The description "monocyte/macrophage, and lymphocyte etc." is recommended.

Changes made to reflect it happens prior to than as a subsequent event. First statement on updated with "Type A fibroblast-like synovial cells"

In Figure 1, 2a, 3, it's better to mark the pathological Condylar Resorption with symbols to make it straightforward and easy to understand.

Done. Thank you

Reviewer B

P4 L118: Add this reference here:

Mercuri LG, Abramowicz S. Temporomandibular Joint Arthritic Disease. In, Contemporary Oral Medicine. Farah C, Balasubramaniam R, McCullough M. (Eds). Springer International Publishing. New York. pp.1919-1954, 2018.

Added. This will also be used for metabolic arthritis

P5 L136: Short section on lab tests, maybe a table?

Will need a longer duration to resubmission if I need to add new paragraph and redo all the references. Added some examples to the text itself. I am beyond the deadline for the resubmission

P9 L272: Would like to use this acronym throughout the series when referring to alloplastic total TMJ replacement.

Sounds good, agree with use of this acronym

P10 L 286: References:

Hawkins A, Mercuri LG, Miloro M. Are Rib Grafts Still Used for Temporomandibular Joint Reconstruction? J Oral Maxillofac Surg 78:195-202, 2020.

Mercuri LG. Costochondral Graft Versus Total Alloplastic Joint for Temporomandibular Joint Reconstruction. Oral Maxillofac Surg Clin North Am 30:335-342, 2018.

Added. Thank you

P10 L294: Reference:

Mercuri LG (Ed). Temporomandibular Joint Total Joint Replacement – TMJ TJR – A Comprehensive Reference for Researchers, Material Scientists and Surgeons. Springer International Publishing. New York. 2016.

Added. Thank you

P11 L322: Reference?

Added. Thank you