

Reviewer's code: 00058573

COMMENTS TO AUTHORS

The study is well written But it is too lengthy. Everything is three times the required size. Even in INTRODUCTION, a mini review has been written on fecal incontinence. The authors need to make this more concise. The text is whopping 5551 words. Kindly make the text (Introduction, Methods, Results & Conclusions) to less than 2500, References 75 to 35 and Figures from 9 to 5.

RESPONSE TO REVIEWER:

Dear reviewer.

Thank you very much for your remarks. We have taken them into consideration. In the journal "Instructions for authors", there are no restrictions in the text length, number of figures or tables, and references number. That is the reason we wrote such a lengthy paper.

Looking for a balance between editorial board instructions and your comments, we have exhaustively reviewed our manuscript and shortened it. Previously to add some data requested by other reviewers, this new version has been reduced on 1500 word (now it has 4100), two figures have been deleted and references are now 67.

Taking into account that there are no restrictions on references number, our team thinks it is better to provide all the relevant published literature for our future readers.

Thank you very much again for your wise commentaries.

Yours sincerely.

Reviewer's code: 02446101

COMMENTS TO AUTHORS

This study established a new method to treat the anal sphincter injury and proved their methods meaningful. So, the manuscript provides some new ideas to the readers. Acceptance should be recommended for the publication.

RESPONSE TO REVIEWER:

Dear reviewer.

Thank you very much for your commentaries and for recommending our manuscript for publication. We hope it could be finally published and we can continue working on this field of knowledge.

Yours sincerely.

Reviewer's code: 00004011

COMMENTS TO AUTHORS

It is a very interesting manuscript.

RESPONSE TO REVIEWER:

Dear reviewer.

Thank you very much for your commentaries and for recommending our manuscript for publication. We hope it could be finally published and we can continue working on this field of knowledge.

Yours sincerely.

Reviewer's code: 00070577.

COMMENTS TO AUTHORS

Trebol et al. reported the biosutures and injections are suitable for cell delivery. The paper showed the usefulness of this procedure. There are some concerns; 1) The authors employed ASC; adipose-derived stem cells. I think the adipose derived mesenchymal stem or stromal cells may be better. 2) The authors do not mentioned the mechanisms why ASC showed therapeutic effect. The authors should show the expression protein etc... in results or discussion.

RESPONSE TO REVIEWER:

Dear reviewer.

Thank you very much for your appreciations. We have taken all of them into consideration.

Related to your *first question*, ASC acronym and significance is accepted by an international consensus.

Multipotent cells in adipose tissue were postulated to exist by Kaplan and colleagues. Interest in multilineage cells from adipose tissue gained relevance after 2001, when Zuk published their pioneer paper showing differentiation of stromal-type cells from adipose tissue along adipogenic, chondrogenic and osteogenic lineages (Zuk PA, et al. Multilineage cells from human adipose tissue: Implications for cell-based therapies. *Tissue Eng* 2001; 7: 211-228).

The cells isolated from adipose tissue have been given various names, including adipose stem cells, adipose-derived stem cells, and adipose-derived stromal cells, among others. A consensus statement was published following the International Fat Applied Technology Society (IFATS, now known as the International Federation for Adipose Therapeutics and Science) 2nd international meeting in 2004, concluding that they should be referred to as adipose-derived stem/stromal cells (ASC) to promote consistency across research group. ASCs are a type of MSCs, and we have added this assessment to our paper's introduction.

Answering your *second question*, it was not an objective of this study to investigate ASCs action mechanism; we are going to continue working on this field and we hope we will be able to add some new or relevant information on the matter like our colleagues Georgiev-Hristov or Riera. That is the reason we have only mentioned some information about this issue. We have not studied expression protein so we are not able to add information about it.

Nevertheless, to fulfill your request we have added some new information highlighted on the discussion section:

Their multi-lineage differentiation potential coupled with their immune-privilege and their ability to stimulate resident progenitor cells through paracrine secretion as well as their angiogenic potential are important.[...]. There is great interest in identifying ASCs secretome and immunosuppressive properties.

Thank you very much for your wise commentaries.

Yours sincerely.

Reviewer's code: unknown.

COMMENTS TO AUTHORS

Well written manuscript. The authors would have used b-Gal which would have been more specific. Nonspecific green fluorescence is shown by many cells (in mice naturally). Authors would have also killed mice and tried to isolate the GFP +ve cells and looked for live cells (live-dead staining). Overall, the paper is satisfactory and I recommend the manuscript for favour of publication.

RESPONSE TO REVIEWER:

Dear reviewer.

Thank you very much for your appreciations and for recommending our manuscript for publication. We have taken them into consideration.

Regarding the use of eGFP: to reduce the effect of spontaneous natural fluorescence we took measures to reduce it, we used primary antibody omitted sections as negative controls (to avoid false positives) and we used immunofluorescence with an antiGFP antibody. With this methodology we are able to detect GFP presence but not GFP fluorescence, sometimes too faint to be confounded with spontaneous auto-fluorescence. Using b-gal could be a similar methodology.

Looking for GFP+ live cells is an interesting tool we could not apply because we fixed immediately the specimens on formaldehyde but we could use it in the future.

To fulfill your request we have added some new information highlighted on the material and methods section:

To reduce the effect of spontaneous natural fluorescence, we used primary antibody omitted sections as negative controls and detected GFP presence and not GFP fluorescence, sometimes too faint.

Thank you very much for your wise commentaries.

Yours sincerely.