

Has Platelet-Rich Plasma any role in partial tears of the Anterior Cruciate Ligament? Prospective Comparative study

Reviewer #1

Patients received one injection- would it help to repeat it?

Answer:

Thank you very much for this interesting observation. Number of PRP injections is thoroughly study in knee osteoarthritis, however, there is lack of knowledge regarding the use of PRP in partial ACL tears. By the time of the study we believed that one injection was enough to provide a biological environment to enhance ACL healing.

The time point of injection should be stated in the abstract and it would be nice to explain, how was it selected?

Answer:

The injection was performed before the fourth week after injury. Patient selection is explained in methods, patient population, (line 127).

line 162: was it injected into the joint space or into the ACL?

Answer:

It was injected into the joint space, aiming at the ACL (as through the anteromedial portal in the setting of an ACL-reconstruction)
(line 177)

Discuss also the time point of injection (early within the inflammatory phase of healing or at which other phase?).

Answer:

The injection was intended within the inflammatory phase. (lines 128)

Would it be better to apply it later?

Answer:

Very interesting question. As I previously stated, there is no much literature on this topic. We believe that after the acute phase (3 to 4 weeks), ACL fibers might start to retract and reabsorb.

Is the group size of 21 and 19 patients sufficient in regard to the heterogeneity of tears (location, size) included?

Answer:

As we stated in limitations (line 311) more patients are required to obtain more power out of the sample. Nevertheless, patients with partial tears of the ACL with such strict inclusion criteria (line 114 to 119) are very rare.

How about the leukocyte content of the lysate?

Answer:

In this study, for healing purposes we decided to use a PRP with a reduced concentration of leukocytes (line 127).

Page 4, line 73 „postive Lachman“ use the same term like on page 5, line 103

Answer:

The sentence in the introduction was changed in order to not be redundant (line 79)

Line 114: explain the abbreviation „IKDC“ International Knee Documentation Committee

Answer:

The meaning of the abbreviation IKDC was added (line 125)

Page 7, Line 178: „since“ write „during“

Answer:

The word since was replaced with the word “during” (line 191)

Line 205: „decreased“ write „decrease“

Answer:

The word decreased was replaced with the word “decrease” (line 219)

Line 206: side to side difference explain in the discussion why it became even greater in some patients

Answer:

In some cases, side to side difference in KT-1000 arthrometric evaluation was greater probably due to a lack of healing of ACL fibers, particularly cases when the anteromedial bundle was affected. Nevertheless, most of these patients are active in their sports practice. (lines 273 to 277)

Line 294: write „established“ instead of „stablished“

Answer: (line 314)

Science editor

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Answer:

This does not apply. It is not a randomized trial.

(1) The “Author Contributions” section is missing. Please provide the author contributions;

Answer:

Author contribution: The use of PRP for “healing” purposes is still controversial in some fields such as muscle tears or ligamentous lesions. In this setting, different authors are trying to prove if PRP would improve healing. Nevertheless, to our knowledge there are no comparative series reported in the literature regarding this topic. After more than two years follow-up, we found no difference when using intraarticular injection of PRP for patients with partial ACL tears in any of the outcome measures evaluated, including MRI images, clinical outcomes, failure to heal or return to sports. We provide very complete and detailed information about the PRP preparation, which is very important for further investigations. (lines 330 to 340)

(2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor

Answer:

Original .jpg pictures are provided and a .pptx in case the editor needs to reprocess the picture.

(3) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references.

Answer:

DOI numbers were added for every author (lines 7, 13, 18, 24, 29)

(4) The “Article Highlights” section is missing. Please add the “Article Highlights” section at the end of the main text

Answer:

Article Highlights: This is a prospective, comparative series of a very un-frequent ACL lesion. The PRP preparation was standardized in order to obtain a similar product in all patients. There was no difference when using or not an intraarticular injection of PRP in terms of healing for partial ACL lesions. (lines 342 to 365)

(5) Authors should always cite references that are relevant to their study. Please check and remove any references that not relevant to this study

Answer:

All references were checked.