

Diversity around the effects of platelet-rich plasma for medical conditions

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The Problem

Considering the current use of platelet-rich plasma (PRP) for a wide range of medical conditions, the assessment of its clinical effects by an evidence-based approach is crucial.

Objectives

To provide a comprehensive synthesis of findings derived from systematic reviews (SRs) assessing effectiveness and safety of PRP.

Methods

Review of SRs Search strategies were applied in MEDLINE, Embase, Cochrane Library and LILACS in July 2018 to identify SRs of randomized controlled trials (RCTs) focusing on PRP for all types of non-transfusion use. Two authors independently screened all retrieved references in two stages (titles and abstracts at a first stage and full texts at a second stage). SRs were considered eligible if only RCTs were included. The methodological quality of the included SRs was appraised in accordance to AMSTAR 2. Conclusions were based on the most recent SRs with the highest quality.

Key Results

1,240 references were retrieved. After scrutinized against the inclusion criteria, 29 SRs of RCTs related to three different fields (wound care, orthopedics and dentistry) were included. We found results suggesting some benefit of PRP for diabetic wounds, acute and chronic lesions of musculoskeletal system, allogenic bone graft for dental implants, and periodontal intrabony defects.

Conclusions

There is a diversity on the certainty of evidence (ranging from low to moderate) supporting the use of PRP for specific clinical situations. The low quality of the evidence limits the certainty of these findings. Despite the increasing use of PRP, both in clinical practice and in research projects, uncertainties remain about PRP effects.



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