

Platelet Rich Plasma (PRP) treatment for pain: Saviour or Hoax – What is Presented Online?

Victoria Bains, RN, BScN, MN; Abeer Alomari, MD; Danielle Alvares, PhD; Anuj Bhatia, MD, PhD

Comprehensive Integrated Pain Program, Toronto Western Hospital, Toronto, Ontario, Canada



Introduction

•PRP is becoming commonplace in a multitude of settings for a low risk high-reward treatment options for chronic pain.

•The literature is not conclusive on specific guidelines for PRP administration in the way in which it is spun, amounts required for therapeutic effect.

•Yet the level of benefit on online sites the results are astounding with almost guaranteed like effects.

Methods

•With the use of on online tool, Quality Evaluation Scoring Tool (QUEST), websites were reviewed of medical centres/clinics across North America in the English language.

•The search was done utilizing Google from July 1, 2024 to July 31, 2024.

•Each webpage was independently reviewed by a Registered Nurse and physician who are both well versed in Pain Medicine and the role of PRP treatments.

•If scores varied it was discussed with the senior author.

“Plasma (PRP) therapy is a special technique that effectively uses your body’s natural healing powers to treat conditions like osteoarthritis and tendonitis.”

“Our PRP services specialize in aiding your recovery from injuries across various body parts, ensuring you regain your strength and mobility.”

Results

•39 webpages reviewed

“Platelet-rich plasma (PRP) injections are a growing trend in pain management.”

•Over 75% rated poorly in all sections of the QUEST tool

“PRP therapy reduces pain and promotes healing in your muscles and joints.”

•82% has no references

•90% of webpages had a conflict of interest in which treatment was endorsed or promoted

“The beauty of PRP therapy is that it utilizes the body’s own healing abilities to directly address and repair damaged tissue.”

“From famous athletes looking for fast recovery from sports injuries to people struggling with arthritis pain, PRP injections have lived up to the hype when it comes to reducing pain and promoting healing.”

Table 1: Quest Tool Scoring	
Score Tools	Number of Sites
Authorship	
0 – No indication of Authorship or Username	33 (85%)
1 – All other indications of authorship	1 (3%)
2 – Author’s name and qualifications clearly stated	5 (13%)
Attribution	
0 – No Sources	32 (82%)
1 - Mention of Source, research findings (though with insufficient information to identify the specific sources) links to various sites, advocacy body, or other	0
2 - Reference to at least one identifiable scientific study, regardless of format (e.g. information in text, reference list only	4 (10%)
3 - Reference to mainly identifiable scientific studies, regardless of format (in > 50% of claims	3 (8%)
For all articles scoring 2 or 3 on Attribution:	
Type of Study	
0 - In vitro, animal models, or editorials	0
1 - All observational work	0
2 - Meta-analyses, randomized controlled trials, clinical studies	7 (100%)
Conflict of Interest	
0 - Endorsement or promotion of intervention designed to prevent or treat condition	27 (69%)
1 - Endorsement or promotion of educational products & services	8 (21%)
2 - Unbiased information	4 (10%)
Currency	
0 - No date present	12 (31%)
1 - Article is dated but 5 years or older	0
2 - Article is dated within the last 5 years	27 (69%)
Complementary	
0 - No support of the patient- physician relationship	16 (41%)
1 - Support of the patient-physician relationship	23 (59%)
Tone	
0 - Fully supported (authors fully and unequivocally support the claims, strong vocabulary such as “cure”, “guarantee” and “easy”, mostly use of non-conditional verb tenses (“can”, “will”), no discussion of limitations)	26 (67%)
1 - Mainly supported (authors mainly support their claims but with more cautious vocabulary such as “can reduce your risk” or “may help prevent”, no discussion of limitations)	10 (26%)
2 - Balanced/ cautious support (authors’ claims are balanced by caution, includes statements of limitations and/or contrasting findings)	3 (7%)

Conclusion

There is potential for misinformation and subsequent harm to patients who consider PRP as a therapy for pain based on the information presented on the websites.

References

- 1.Mishra A., & Pavelko, T. (2006). The American journal of sports medicine.
2. Robillard, J. M. et al. (2018). BMC medical informatics and decision making.
- 3.Vilchez-Cavazos, F. et al. (2023). Archives of orthopaedic and trauma surgery.