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RE: Technical considerations in obtaining platelet-rich fibrin for clinical and periodontal research

To the Editor:

We are writing to you regarding the recent publication by Bains et al.,[1] which appeared in your esteemed journal. As a researcher whose studies were cited in this narrative review, we would like to commend the authors for their efforts to contribute to the scientific discourse. Nevertheless, there are a few inaccuracies that I believe should be addressed to enhance the article's precision and reliability.

The first point pertains to the data presented in Table 1. There appears to be a misinterpretation regarding the nomenclature of heated platelet-rich fibrin (PRF). Specifically, the term "Alb-PRF" is attributed to Kawase et al.[2] However, their study did not define the PRF membrane post-heating with this nomenclature. It was actually Mourão et al. who, in a 2018 publication, first described the blood by-product, combining the albumin gel with the liquid platelet-rich fibrin, which was obtained through the Medifuge protocol (Silfradent S.r.l., Santa Sofia, Italy) and at that time was called "Alb-CGF".[3] The term "Alb-PRF" was subsequently introduced in a study by Fujioka-Kobayashi et al.,[4] and it builds upon the principles set forth by Mourão et al.

Moreover, there is a discrepancy in the description of the equipment used to produce Injectable PRF (i-PRF) in 2015, in this study, the authors used a horizontal centrifuge to obtain the i-PRF.[5] In addition, the narrative review attributes the introduction of a specific process to Zheng et al., in 2022,[6] while in fact, it was Lourenço et al.[7] who, in 2018, utilized a Horizontal centrifuge (RDE, Rio de Janeiro, Brazil). This pioneering work deserves accurate recognition for its innovative approach.

The review also contains several typographical errors regarding authors' names, such as "Choukroun" being referred to as "Chaukroun" and "Choukran", and "Miron" as "Mirion". These are more than mere oversights as they concern the proper identification of contributors to the field.

Additionally, the misuse of the term 'G-Force' in place of 'g-Force', related to the relative centrifugal force (RCF), is a conceptual error that should be rectified. G-force is indeed a measure of acceleration, but G-force is a measure of gravitational force experienced by an object, while g-Force centrifugation is a measure of the acceleration applied to particles during the centrifugation process, typically expressed in terms of "g" to describe the RCF compared to gravity.

These inaccuracies, while they may be seemingly minor, could potentially lead to confusion and misinterpretation of the data, particularly for those newly acquainted with the subject matter. Overall, the purpose of this correspondence is to highlight areas of potential confusion and to preempt any future misconceptions, particularly with regard to the narrative review process and peer review standards. Many of the oversights identified could likely be averted with a more rigorous selection of cited articles and meticulous scrutiny during manuscript editing and revision. We hope that by addressing these issues proactively, we can collectively enhance the clarity and accuracy of future publications.

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Table 1
Timeline and technical specifications for evolution and modifications in platelet rich fibrin (according to Bains et al.[1]).

Year	Author	Protocol	Equipment Used	Nomenclature
2001	Choukron et al.	3000 rpm (750 g) for 10 min		Chaukroun's PRF
2006	Choukron et al.	3000 rpm (750 g) for 12 min	Fibrinet	Pure Platelet Rich Fibrin (P-PRF) or Standard Platelet Rich Fibrin (S-PRF)
2006	Dohan Ehrenfest et al.	2700 rpm (400 g) for 12 min	Open-access method, IntraSpin, Intra-Lock International, BocaRaton, Floroda; Salvin 1310, Charlotte, NC, USA; LW-UPD8 (LW Scientific)	Leukocyte-and platelet-rich fibrin (L-PRF)
2006	Sacco	Acceleration for 30 s, followed by 2 min centrifugation at 2700 rpm (692 g), 4 min at 2400 rpm (547 g), 4 min at 2700 rpm (592 g), 3 min at 3000 rpm (855 g) and finally 36 s deceleration and stopped	Programmed spin cycle, Medifuge, Silfradent, Sofia, Italy	Concentrated growth factor (CGF)
2012	Tunali et al.	2800 rpm for 12 min (prepared in 10 ml titanium tube)	EBA 20, Andreas Hettich GmbH & Co. KG, Tuttlingen Germany	Titanium Platelet Rich Fibrin (T-PRF)
2014	Ghanaati et al.	1500 rpm (200 g) for 14 min	PROCESS for PRF, Nice, France; Advanced PRF Process, France	Advanced-Platelet Rich Fibrin (A-PRF)
2015	Mourao et al.	3300 rpm for 2 min	Duo Process, France	Injectable PRF (i-PRF)
2015	Kawase et al.	700 g for 8 min, Heat compression of PRF	Medifuge centrifugation system (Silfradent S.r.l., Santa Sofia, Italy)	Alb-PRF
2017	Fujioka-Kobayashi et al.	1300 rpm (200 g) for 14 min	Duo Centrifuge, Process for PRF, Nice, France	Advanced-Platelet Rich Fibrin (A-PRF)
2017	Fujioka-Kobayashi et al.	1300 rpm (200 g) for 8 min	Duo Centrifuge, Process for PRF, Nice, France	Advanced-Platelet Rich Fibrin (A-PRF +)
2018	Simon et al.	1710 g for 5 min	With the use of a flat forceps, the serum portion squeezed out of the fibrin clot	SPRF (serum from platelet-rich fibrin) or HAS (hyperacute serum)
2021	Fujioka-Kobayashi et al.	700 g for 8 min Followed by 10 min cooling of PRF with albumin gel	Eppendorf centrifuge 5702 machine (Hamburg, Germany)	Albumin-PRF (Alb-PRF)
2022	Zheng et al. Dashore et al.	700 g for 8 min	Bio-PRF, Venice, Florida	Horizontal PRF (H-PRF)
2023	Bains et al.	3000 rpm for 18 min	REMI-R-303	PRF in patients with uncontrolled diabetic

Declaration of competing interest

The authors declare no conflict of interest.

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