The place of Platelet-Rich Plasma (PRP) injection in primary care for patients suffering from knee osteoarthritis.

Wim Duys, KU Leuven

en

Joppe Hermans, KU Leuven

Promotor: David Spitaels, KU Leuven

Co-promotor: Bert Aertgeerts, KU Leuven

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Abstract

Achtergrond: Knieartrose (OA) is een veelvoorkomende degeneratieve gewrichtsaandoening die gepaard gaat met chronische pijn, verminderde mobiliteit en een verminderde levenskwaliteit. Hoewel corticosteroïdinjecties op korte termijn symptoomverlichting bieden, wordt er steeds vaker gezocht naar alternatieve niet-chirurgische therapieën met langduriger effect. Plaatjes-rijk plasma (PRP), een autoloog bloedproduct verrijkt met bloedplaatjes en groeifactoren, heeft regeneratieve en anti-inflammatoire effecten aangetoond. De implementatie ervan in de huisartsenpraktijk is echter nog onvoldoende onderzocht.

Doelstelling: Het evalueren van de haalbaarheid, veiligheid en ervaren effectiviteit van intra-articulaire PRP-infiltraties voor knieartrose in de huisartsenpraktijk in Vlaanderen, België.

Methoden: Er werd een kwalitatieve observationele studie uitgevoerd met behulp van vragenlijsten bij zowel huisartsen als patiënten. Via de vereniging van Sport en Keuringsartsen (SKA) zijn we op zoek gegaan naar huisartsen die PRP uitvoeren in hun huisartsenpraktijk voor knieartrose. Deze 229 huisartsen werden benaderd via email (n = 182) of telefoon (n = 49). De vragenlijst werd digitaal verstuurd, via een link naar LimeSurvey, naar de huisartsen die wensten deel te nemen. Nadien werd er gevraagd aan de deelnemende huisartsen om een andere vragenlijst te laten invullen door patiënten die in hun praktijk een eenmalige PRP infiltratie ondergingen tussen september 2024 en oktober 2025. Patienten werden geëxcludeerd indien ze eerder infiltraties met PRP ondergingen in dezelfde knie of bij gebruik van orale glucocorticoïden of NSAID's rond de periode van de infiltratie. Primaire uitkomstmaten waren door patiënten gerapporteerde pijnscores gemeten met de Visual Analogue Scale (VAS, 0–10) voor de infiltratie (= nulpunt), onmiddellijk post-infiltratie, na 2 dagen, 2 maanden en 6 maanden. Secundaire uitkomsten omvatten patiënttevredenheid, bereidheid tot herhaling van de behandeling, procedurele kenmerken bij huisartsen en implementatiebarrières. Beschrijvende statistiek en kwalitatieve thematische analyse werden toegepast vanwege de kleine steekproef.

Resultaten: De deelnemende huisartsen waren overwegend mannelijke, ervaren artsen met variabele procedurevolumes en beperkte protocolstandaardisatie, wat leidde tot heterogeniteit in de voorbereiding en toediening van PRP. De gemiddelde VAS-pijnscore bij het nulpunt bedroeg 6,53 (mediaan 7). De pijn bleef stabiel onmiddellijk na de procedure (gemiddelde 6,27), daalde na 2 dagen (gemiddelde 5,33) en vertoonde een duidelijke verbetering na 2 maanden (gemiddelde 3,73) en 6 maanden (gemiddelde 3,27; mediaan 2). De meest uitgesproken daling trad op tussen 2 dagen en 2 maanden. 11 patiënten rapporteerden een substantieel klinisch voordeel, terwijl 3 patiënten een minimale of negatieve respons vertoonden. Transiënte pijn na injectie was de meest voorkomende bijwerking (n = 6), zonder ernstige complicaties. De patiënttevredenheid was hoog, met een sterke bereidheid om de behandeling te herhalen (gemiddelde 7,73/10) en aan te bevelen (gemiddelde 7,80/10). Niet-naleving van NSAID-adviezen kwam voor bij 25% van de patiënten en was geassocieerd met lagere tevredenheidsscores en verschil in pijnscore.

Conclusie: PRP-infiltratie voor knieartrose lijkt een veilige en potentieel effectieve behandelingsoptie binnen de huisartsenpraktijk, met aanhoudende pijnreductie en hoge patiënttevredenheid na zes maanden. Belangrijke barrières zijn echter de hoge kostprijs en het ontbreken van gestandaardiseerde protocollen. Grotere gecontroleerde studies met gestandaardiseerde bereidingsmethoden zijn nodig om deze bevindingen te bevestigen en de klinische implementatie te optimaliseren.

Introduction

Knee osteoarthritis (OA) is a prevalent and debilitating condition that affects a significant portion of the population with a lifetime risk of 13,83% seen in the United States of America.[1] Characterized by the progressive degeneration of joint cartilage and subchondral bone, knee OA results in chronic pain, stiffness, and impaired mobility, severely impacting the quality of life.[2] As the prevalence of knee OA continues to rise with the aging population and the growing prevalence of obesity, finding effective and accessible treatments are increasingly important.[1-4]

First-line therapy of (knee) osteoarthritis is lifestyle modification such as exercise and weight loss. Usage of analgesics such as paracetamol or topical or systemic NSAIDs is often necessary to diminish pain and discomfort.[5-7] Besides these analgesics, corticosteroid injections are a cornerstone in the management of knee OA due to their potent anti-inflammatory properties, providing rapid pain relief and reduction in joint inflammation.[8,9] However, the benefits of corticosteroid injections are often transient, and concerns about potential adverse effects with repeated use prompt the search for alternative therapies.[10,11]

One such alternative that gains attention is Platelet-Rich Plasma (PRP) therapy. PRP is an autologous blood product enriched with platelets, growth factors, and bioactive proteins, which are thought to promote tissue healing and modulate inflammation.[11] Furthermore, an intra-articular PRP infiltration reduces symptoms of knee osteoarthritis by promoting chondrogenesis and inhibiting the destruction of the knee joint, probably by reducing the production of pro-inflammatory mediators.[12] PRP is already widely used in dermatology to treat acne scars, striae distensae and hair loss known as androgenic alopecia.[13,14] PRP was first utilized as a blood product in patients with thrombocytopenia. It wasn't until the 1970s that PRP was discovered to contain strong growth factors.[15] In the following years PRP was mainly used in specialized surgical applications like cardiovascular and maxillofacial reconstruction surgery.[16] Then, in the early 2000s, PRP made a transition into the usage for "wear and tear" injuries.[17-19] While PRP shows promise in specialized settings such as orthopedic and sports medicine clinics to treat conditions such as tendinopathy and osteoarthritis, its utilization in the general practitioner's office remains underexplored.[20-22]

In 2018, an interventional study in Ireland concluded that PRP is feasible to deliver in primary care for knee osteoarthritis although trials evaluating outcomes and durability of effect are still lacking.[22] Furthermore, two studies demonstrated that intra-articular injection of PRP is a cost-effective treatment option for patients with mild to moderate knee osteoarthritis compared to other injections.[23,24] Our findings aim to assess the use of PRP in general practice with practical guidance on when and how to incorporate PRP infiltrations into their treatment plans. This approach seeks to improve strategies for managing knee osteoarthritis, potentially offering patients a wider range of effective treatment options within a more accessible healthcare environment. Furthermore, we aim to assess additional indications within the spectrum of musculoskeletal disorders. To achieve this, we have adopted an observational study design, utilizing questionnaires distributed to general practitioners and patients.

Materials and Methods

Study Design

This study has a qualitative, observational design and is conducted to explore the viability and current use of platelet-rich plasma infiltrations for knee osteoarthritis in the general practice setting. The study utilizes questionnaire-based data collection from both patients and general practitioners.

Setting and Participants

The study was conducted in general practitioners' offices in Flanders (Dutch part of Belgium). At first, we contacted general practitioners who are members of Sport en Keuringsartsen (SKA) by email. We found a list of the GP's and their contact details on the website of SKA. Some GP's had no given mail address, we contacted these GP's by telephone. Inclusion and exclusion are noted below.

For the GP cohort, inclusion requires active involvement in performing PRP infiltrations for knee osteoarthritis within their practice.

Inclusion criteria for the patient group are:

- Age ≥18 years.
- History of a single PRP infiltration in the knee for osteoarthritis within the preceding 12 months, performed by a GP.

Exclusion criteria are:

- Use of non-steroidal anti-inflammatory drugs (NSAIDs) from two weeks prior to the PRP infiltration until eight weeks after the procedure.
- Receipt of multiple PRP infiltrations in the same knee.
- Use of oral corticosteroids within one month prior to the PRP procedure.
- Receipt of any knee infiltration within two months prior to the PRP procedure in the same knee.

Data Collection

Data was collected using online questionnaires administered through LimeSurvey.[25] Two separate questionnaires were designed:

1. Patient questionnaire – assessing self-reported knee function, pain intensity, and perceived effectiveness of PRP treatment, as well as basic demographic information. Patients were asked to fill out the questionnaire at one singular time.
2. GP questionnaire – assessing clinical decision-making processes, procedural techniques, and perceived indications and limitations for PRP use in knee osteoarthritis.

Both questionnaires were distributed electronically via secure links, with responses stored in an encrypted database (LimeSurvey) to ensure confidentiality.

The GP questionnaire was distributed between 01/05/2025 and 31/10/2025.

The patient questionnaire was distributed between 1/10/2025 and 31/01/2026 by the GP's themselves. The distribution (via paper and digital) was explained by one of the two authors physically at their office. The flow chart of the data collection is visible in figure 1.

Outcome Measures

The primary outcome measures for the patient group were self-reported knee function and pain levels following PRP infiltration. Secondary measures included patient satisfaction and willingness to undergo the procedure again.

For the GP group, outcomes focused on patterns of PRP use, procedural methods, and criteria for patient selection.

Data Management and Analysis

Responses were anonymized prior to analysis. Descriptive statistics were used to summarize patient demographics, GP practice patterns, and questionnaire responses. Qualitative thematic analysis were applied to open-ended responses to identify recurring themes regarding treatment perception and clinical application. Statistical analysis software SPSS will be used for data processing.[26]

Missing outcome data due to loss to follow-up were handled using a last observation carried forward (LOCF) approach, a single imputation method in which the last available measurement was carried forward to subsequent time points.[27, 28]

Ethical Considerations

The study was conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval was obtained from the relevant ethics committee prior to commencement, with reference number MP033394 on 22/1/2025. Participation was voluntary, and all participants were provided informed consent before completing the questionnaire.

Results

Three general practitioner offices conducted the questionnaire and responded after the first mailing invitation.

Hereafter we contacted the offices that didn't reply by telephone. Another 5 offices wanted to participate in our research. GP offices were included if they use PRP infiltration in monotherapy in their office for knee osteoarthritis and other pathologies (non-specified).

After the conduction of 8 GP offices, we asked them to deliver a questionnaire to their patients that were treated with PRP for knee osteoarthritis in the last 12 months (September '24 - October '25). We have visited 6 offices physically to give more information on how to enroll the patient surveys. Ultimately, four offices helped with the data collection of patient outcomes.

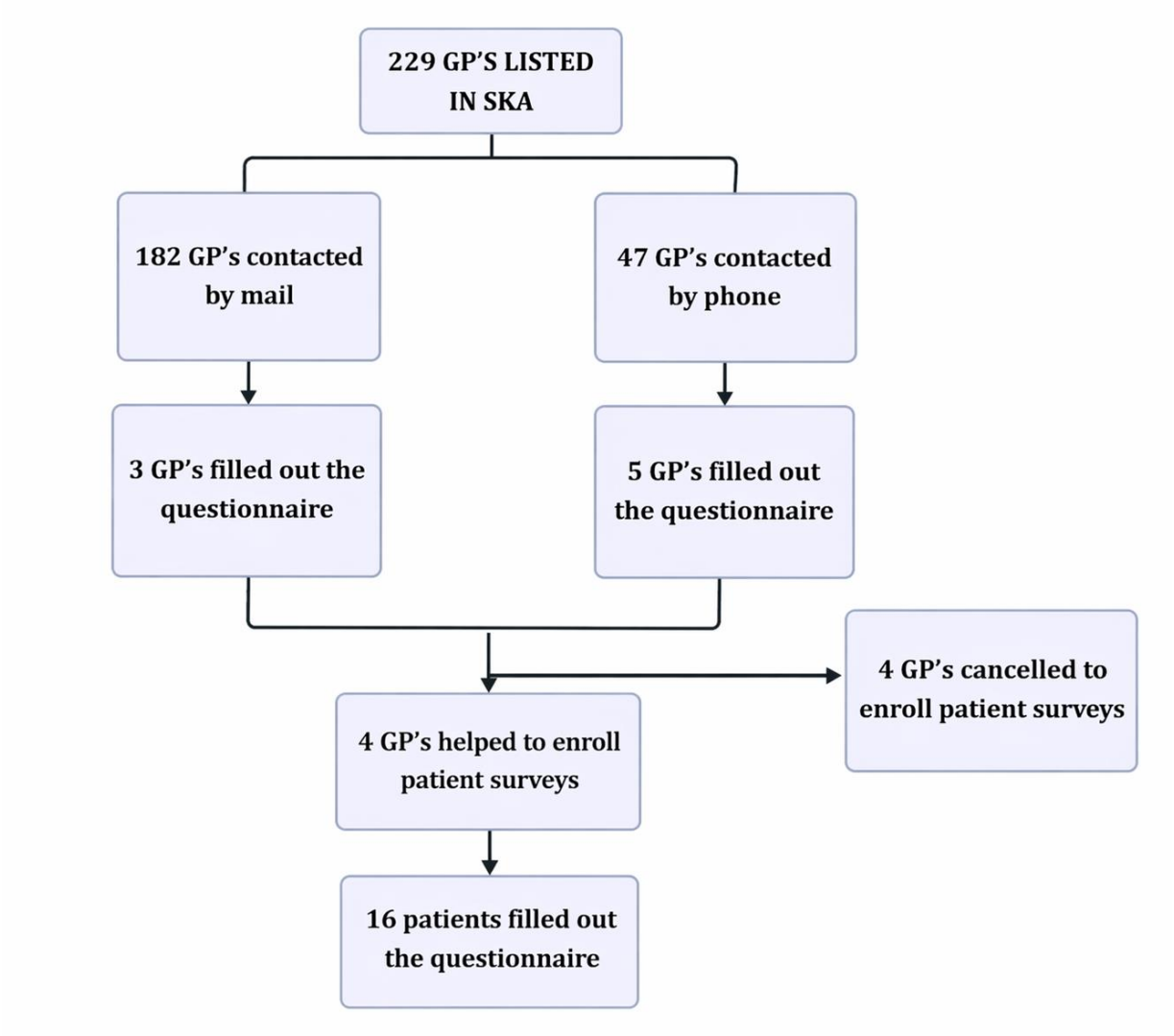


fig. 1: Flow chart of the data collection

SKA: Sport en Keuringsartsen Vlaanderen

General Practitioners

1. Practitioner and practice characteristics

The primary data were collected via a LimeSurvey questionnaire completed by eight general practitioners (GPs). All participating clinicians identified as male. Age distribution was skewed toward senior practitioners: six were older than 55 years, one was between 46–55, and one was between 26–35. Geographic representation spanned all five provinces of Flanders (Antwerp: n=2; East Flanders: n=2; Limburg: n=2; West Flanders: n=1; Flemish Brabant: n=1). Regarding practice structure, no community health centers or flat-rate facilities participated. The sample consisted exclusively of performance-based funding models, primarily duo practices (n=5) and one solo practice.

2. Usage of PRP

Nursing or administrative support is available in five out of eight practices. In the remaining three, the GP performs the entire procedural chain (venous blood sampling, centrifugation, PRP

isolation, and infiltration). Professional experience varied significantly: six GPs reported over 30 years of experience, while only one had practiced for fewer than 10 years. For knee osteoarthritis, the annual volume of PRP infiltrations ranged from 5 to 50 (mean = 25.6 ; median = 22.5). For other pathologies, primarily tendinopathy (n=8) and non-knee osteoarthritis (n=4), the volume ranged from 5 to 35 (mean = 18.75; median = 17.5). Notably, PRP was not used for dermatological indications (e.g., alopecia or acne). While four practices had established internal protocols, two practices with auxiliary staff operated without written guidelines. Motivation for implementing PRP was driven by an interest in musculoskeletal medicine; two clinicians cited the positive experiences of peers as their primary influence.

3. Infrastructure and materials

The acquisition of centrifugation systems represents a significant capital expenditure. Only one practice funded the equipment independently, while the remaining seven acquired systems through medical equipment representatives. To mitigate financial risk, seven practices implemented an additional patient fee compared to conventional infiltration techniques (e.g., hyaluronic acid or corticosteroids). Specific fee amounts were not recorded due to privacy considerations. Material costs per infiltration were reported to exceed €40 in all cases, with five respondents citing costs above €50.

4. Procedure

Consultation duration varied between less than 15 to 30 minutes. In practices employing nurses (n=4), three involve the nurse in venipuncture, centrifugation, and preparation, while one nurse remains uninvolved in the procedure. Post-injection advice universally included relative rest. However, only three practitioners explicitly advised the avoidance of anti-inflammatory medications (NSAIDs or corticosteroids). The frequency of infiltration ranged from a single session to over 5 sessions per patient. The most common treatment interval was 4–6 weeks (n=4), followed by 2–4 weeks (n=3) and 6–8 weeks (n=1). Education was primarily acquired through lectures or workshops (n=6), peer-to-peer training (n=3), manufacturer instruction (n=2), or literature review (n=2). Reported barriers to implementation included a perceived lack of high-level evidence, material costs, post-injection pain, procedural time, and patient selection (each n=1). Four clinicians reported no obstacles.

Patients

1. Characteristics

Sixteen patients from four practices completed the questionnaire. One patient was excluded due to a prior PRP treatment in the ipsilateral knee. The cohort was predominantly male (n=10) compared to female (n=5). Age distribution showed that 50% were 55 years or older (n=7), with the 36–45 age bracket being the second largest (n=5). Regarding lifestyle factors, one patient was identified as an active smoker. Prior conservative treatments included intra-articular corticosteroids (n=9), physiotherapy (n=6), or hyaluronic acid (n=3). Two patients received PRP as a primary intervention without prior therapy.

2. Efficacy

Pain was assessed using a Visual Analogue Scale (VAS 0–10). Pain score was measured on the following moments during the PRP procedure in the general practice:

- **At Baseline:** The mean pain score immediately prior to infiltration was 6.53 (median = 7).
- **In the Acute Phase:** Several hours post-infiltration, scores remained stable (mean = 6.27; median = 7).
- **In the Sub-acute Phase:** At 2 days post-treatment, the mean score decreased to 5.33 (median = 6).
- **In the Intermediate Term:** At 2 months, a significant reduction was observed (mean = 3.73; median = 3).
- **At Long Term:** At 6 months, scores reached their nadir (mean = 3.27; median = 2).

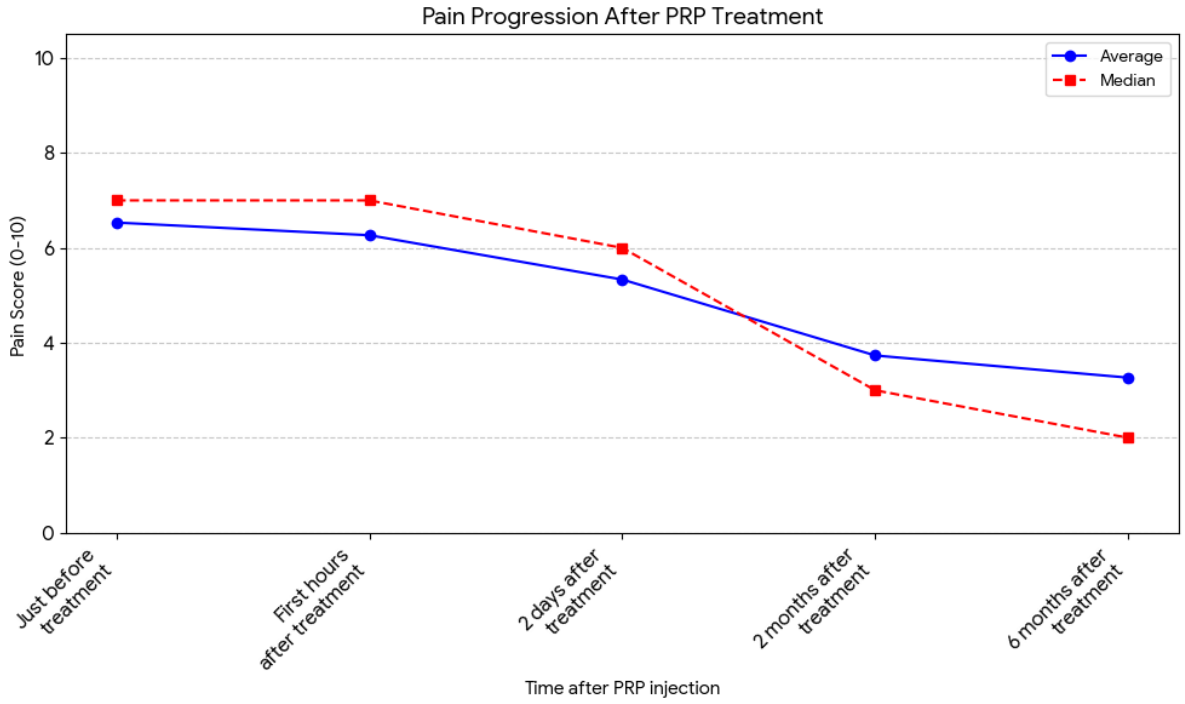


Fig. 2: Evolution of pain scores after PRP infiltration

Individual response analysis revealed that two patients derived no clinical benefit. One patient reported increased pain at all follow-up intervals except the immediate post-operative period. Conversely, the majority of the cohort (n=11) experienced significant symptomatic relief, with the most substantial rate of improvement occurring between 2 days and 2 months post-infiltration, maintaining stability through the 6-month mark.

As described above, loss-to-follow up was handled by principle of last observation carried forward (LOCF). We missed data from 2 patients since 2 months and 2 patients at 6 months post-infiltration. This can lead to an underestimation of the efficacy if we can assume patients would develop further improvement (at 2 and 6 months).

3. Patient Education and Medication Compliance

The clinical efficacy of PRP therapy is theoretically contingent upon the avoidance of non-steroidal anti-inflammatory drugs (NSAIDs), which may interfere with the growth factor release and the subsequent regenerative cascade. Patient perceived literacy regarding these restrictions was generally high: the majority of respondents reported being "Excellent" (n=6)

or "Well" (n=5) informed. However, a sub-group characterized their instructions as "Moderate" (n=2) or "Not at all" (n=2) informed.

Analysis of the primary data revealed a notable discrepancy between clinical instruction and patient behavior. Despite the reported education levels, four patients (n=4) admitted to the use of NSAIDs within the contraindicated window (two weeks pre-treatment to eight weeks post-treatment). Additionally, one patient reported uncertainty regarding their pharmacological compliance during the study period.

4. Adverse Events and Complications

The safety profile observed in this cohort was largely favorable, with no reports of systemic or severe adverse reactions. Most participants (n=9) explicitly reported the absence of complications. Among the minor adverse events noted:

- **Transient Pain Exacerbation:** The most prevalent side effect was a localized increase in pain following the infiltration (n=6). Qualitative data suggests that while pain intensity increased in the immediate days following the procedure, it typically underwent gradual resolution within the first week.
- **Local Injection Site Reaction:** One instance (n=1) of a localized reaction or hematoma at the puncture site was recorded. No cases of deep-tissue infection or neurovascular injury were reported.

5. Patient Satisfaction and Treatment Validation

Patient-centered outcomes were further evaluated by assessing the likelihood of treatment re-engagement and peer recommendation, measured on a 10-point Likert scale. These metrics serve as a proxy for the perceived clinical value and success of the intervention from the patient's perspective.

- **Future Treatment Intent:** The cohort demonstrated a robust intent to undergo future PRP therapy if required, yielding a mean score of 7.73 and a median of 9.
- **Recommendation Propensity:** The likelihood of recommending the procedure to family or peers suffering from knee osteoarthritis was similarly elevated, with a mean score of 7.80 and a median of 9.

These high validation scores, particularly the medians, suggest that the perceived long-term symptomatic benefit outweighs the transient post-procedural discomfort for the vast majority of the participants.

Discussion

Practitioner Profiles and Procedural Standardization

The data reveals that in our study PRP is primarily being used by highly experienced, male general practitioners, with 75% of participants having over 30 years of clinical practice. This suggests that while PRP is a relatively modern regenerative therapy, its adoption in Flanders is currently driven by senior clinicians rather than early-career physicians.

Notably, 50% of the surveyed practices operate without a formalized, written clinical protocol. Furthermore, the procedural volume varied significantly, ranging from 5 to 50 infiltrations per annum per practice. This high degree of heterogenicity in clinical application underscores a critical need for standardized guidelines to ensure reproducible and optimized patient outcomes across primary care settings.

In our research we didn't evaluate the diversity of PRP infiltration like leucocyte-rich (LR) and leucocyte poor (LP) platelet rich plasma. A consensus statement of 2024, from thirty five orthopedic surgeons and sports medicine physicians, agreed to prefer LP-PRP over LR-PRP for osteoarthritis.[29] Timing and dosage of PRP remains unclear.[29]

Economic and Structural Barriers

The implementation of PRP therapy in a general practice setting necessitates significant capital expenditure, primarily due to the cost of centrifugation systems and specialized disposable materials. The former can be purchased for a price ranging in between a few hundred to several thousands of euros, while the latter frequently exceeds €50 per infiltration. These financial requirements represent a substantial barrier to entry for many practitioners. Consequently, the majority of practices (n=7) utilize a private-pay model, transferring costs to the patient. This economic structure positions PRP as a "premium" intervention, which may inherently limit patient accessibility and contribute to socioeconomic disparities in treatment availability. Likewise, patients with increased reimbursement can't use PRP as a therapy in Belgium because of the prohibition on additional charges.

Clinical Efficacy and the "Healing Curve"

The patient data demonstrates a classic biological "healing curve" typical of regenerative medicine. This aligns with the physiological working of platelets and inflammatory response described above.

The most significant clinical improvement was observed between the sub-acute phase (2 days) and the intermediate term (2 months), during which the median Visual Analogue Scale (VAS) score decreased from 6 to 3 . By the 6-month follow-up, the median VAS score further decreased to 2, indicating a highly favorable therapeutic trajectory. These results are particularly significant given that 60% of the cohort had previously failed to achieve relief through intra-articular corticosteroid injections.

The Impact of NSAID Compliance

Approximately 25% of the patient cohort reported the use of non-steroidal anti-inflammatory drugs (NSAIDs) within the restricted peri-procedural window. Given that NSAIDs inhibit the cyclooxygenase (COX) enzymes, which are essential mediators of the inflammatory cascade required to trigger PRP-mediated regeneration, such pharmacological interference may have attenuated the treatment's full regenerative potential.[30] This statement is substantiated by the observed difference in patient satisfaction between individuals who used NSAIDs and those who did not, respectively 5,25 and 7,73 out of 10).

Interestingly, non-compliance was observed even among patients who rated themselves as "well-informed." This suggests that verbal instructions alone may be insufficient; standardized written protocols and more rigorous preoperative counseling are likely required to ensure strict adherence to medication restrictions.

Outliers and Patient Perception

While the majority of the cohort experienced substantial symptomatic relief, outliers were present: two patients reported no clinical change, and one patient experienced an exacerbation of symptoms. These variations in efficacy may be attributed to individual patient factors, such as the severity of baseline joint degradation (Kellgren-Lawrence grade)[31] or lifestyle factors. For instance, active smoking is known to impair systemic healing and diminish platelet bioactivity.[32, 33]

Despite these variables, the subjective validation of the treatment remained high. Patients expressed a strong intent to undergo future treatments and a high propensity to recommend the procedure to others. This suggests that the long-term symptomatic benefit and the biological nature of the treatment are highly valued by patients, outweighing both the transient post-injection pain and the associated financial costs.

Limitations of the Study

The primary limitation of this study is the relatively small sample size of both practitioners (n=8) and patients (n=15). While the data provides valuable preliminary insights, the small cohort limits the statistical power required to generalize these findings to the broader population of Flanders. Additionally, the recruitment process may have been subject to selection bias; practitioners who have had positive experiences with PRP may have been more likely to participate.

This study utilized an observational, longitudinal design without a control or placebo group. In studies involving chronic pain, the "placebo effect" or the natural wax-and-wane cycle of osteoarthritis symptoms can influence reported pain scores. Without a randomized control trial (RCT) design, it is difficult to definitively attribute all symptomatic improvements solely to the PRP itself.

As noted in the discussion, there was a significant lack of procedural standardization among the participating GP offices. Differences in centrifugation systems, platelet concentrations, and injection intervals (ranging from 2 to 8 weeks) introduce variables that could affect efficacy. Furthermore, the inclusion of a smoker and patients who were non-compliant with NSAID restrictions adds further biological "noise" to the data set.

The reliance on self-reported questionnaires via LimeSurvey introduces the potential for recall bias. Patients may not accurately remember their pain levels from "the first few hours" or "two days after" when asked retrospectively. Moreover, the lack of objective clinical measurements, such as range of motion (ROM) tests or follow-up imaging (X-ray/MRI), means the study relies entirely on the subjective perception of the patient.

The study was restricted to the Flemish region of Belgium and a predominantly male, senior practitioner demographic. The results may not reflect the practices of younger physicians, female practitioners, or healthcare systems in different cultural or economic contexts.

Conclusion

In summary, PRP therapy in general practice appears to be a safe and effective intervention for knee osteoarthritis, yielding high patient satisfaction and significant long-term pain reduction. However, the lack of uniform protocols and the high rate of NSAID non-compliance suggest that better practitioner education and more rigorous patient counseling could further optimize these clinical results.

Recommendations for Future Research

To build upon these findings, future studies should aim for:

- **Larger, Multi-center Cohorts:** Increasing the number of participants to enhance statistical significance.
- **Standardized Protocols:** Implementing a uniform PRP preparation and injection schedule across all participating sites.
- **Long-term Objective Monitoring:** Combining VAS scores with functional assessments and imaging to correlate subjective relief with structural changes in the knee joint.

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Sectie A: Karakteristieken

A1.

In welke leeftijdscategorie valt u?

- [ ] 25-35 jaar
- [ ] 35-45 jaar
- [ ] 45-55 jaar
- [ ] 55+ jaar

A2. Wat is uw geslacht?

- [ ] Man
- [ ] Vrouw
- [ ] Overige

A3. In welke provincie bent u werkzaam?

- [ ] West-Vlaanderen
- [ ] Oost-Vlaanderen
- [ ] Antwerpen
- [ ] Vlaams-Brabant
- [ ] Limburg
- [ ] Overige

Overige

A4. In welk type huisartsenpraktijk bent u werkzaam?

- [ ] Solo praktijk
- [ ] Duo praktijk
- [ ] Groepspraktijk (prestaties)
- [ ] Groepspraktijk (forfaitair)
- [ ] Wijkgezondheidscentrum

Overige ☐

Overige

A5.

Maakt u gebruik van een praktijkassistent(e) of praktijkverpleegkundige?

Ja ☐

Nee ☐

A6. Hoeveel jaren ervaring heeft u als afgestudeerde huisarts?

0-10 jaar ☐

11-20 jaar ☐

21-30 jaar ☐

30+ jaar ☐

Sectie B: PRP gebruik

Hieronder enkele vragen die peilen naar het gebruik van Platelet Rich Plasma (PRP) in uw huisartsenpraktijk.

B1. Hoeveel keer per jaar maken de artsen in uw praktijk gebruik van PRP voor knie-artrose? (tracht zo nauwkeurig mogelijk te zijn)

B2. Hoeveel keer maken u en uw collega's binnen de praktijk gebruik van PRP buiten knieartrose? (Tracht wederom zo accuraat mogelijk te antwoorden)

B3. Over welke aandoeningen gaat het hier dan?

Tendinitis ☐

Bursitis ☐

Artrose (excl. gonartrose) ☐

Acne ☐

Alopecia ☐

Overige ☐

Overige

B4. Heeft de praktijk een protocol uitgewerkt over het gebruik en verloop van PRP toediening?

Ja ☐

Nee ☐

B5. In welke grootteorde ligt de kostprijs voor het materiaal voor een éénmalige toediening van PRP?

< 21 euro ☐

21-30 euro ☐

31-40 euro ☐

41-50 euro ☐

< 50 euro ☐

B6. Hoe heeft de praktijk de centrifuge aangekocht?

Via leveranciers gratis ter beschikking (+ eventuele voorwaarden) ☐

Zelf / door de praktijk aangekocht ☐

Overige ☐

Overige

B7. Worden er extra kosten aangerekend voor het gebruik van PRP binnen de huisartsenpraktijk (in vergelijking met klassieke infiltraties)?

Ja ☐

Nee ☐

B8. Wat is de reden geweest dat u en/of uw collega's gebruik maken van PRP binnen de praktijk?

Uit interesse voor behandeling van locomotorische pathologie ☐

- [ ] Via collega huisartsen die hier reeds gebruik van maakten
- [ ] Voor gebruik in dermatologie / esthetische geneeskunde
- [ ] Overige

Overige

B9. Hoeveel % van de patiënten heeft volgens u een klinisch gunstig effect na een eenmalige PRP infiltratie?

- [ ] 0-20 %
- [ ] 20-40 %
- [ ] 40-60 %
- [ ] 60-80 %
- [ ] 80-100 %

B10. Hoeveel tijd wordt er uitgerekend in de agenda voor de totale procedure? (van venapunctie tot einde van de infiltratie)

- [ ] 15 minuten of minder
- [ ] 16 tem 20 minuten
- [ ] 21 tem 25 minuten
- [ ] 26 tem 30 minuten
- [ ] 30+ minuten

B11. Hoe wordt de praktijkverpleegkundige gebruikt bij de hele PRP procedure?

- [ ] Venapunctie
- [ ] Centrifugeren
- [ ] Inspuiting klaarmaken
- [ ] Assisteren met inspuiting
- [ ] De praktijkverpleegkundige wordt hiervoor niet gebruikt
- [ ] De praktijk beschikt niet over een praktijkverpleegkundige

Overige ☐

Overige

B12. Welke adviezen geeft u aan de patiënt na afloop van de PRP infiltratie?

Er worden geen adviezen mee gegeven ☐

Overige ☐

Overige

B13. Hoeveel keer herhaalt u de procedure maximaal bij dezelfde patiënt? (voor gonartrose)

Enkel eenmalige toedieningen ☐

Twee infiltraties ☐

Drie infiltraties ☐

Vier infiltraties ☐

Vijf infiltraties of meer ☐

B14. Wat is het interval dat u adviseert tussen de eerste twee infiltraties? (indien u hiervan gebruik maakt)

0-2 weken ☐

2-4 weken ☐

4-6 weken ☐

6-8 weken ☐

8+ weken ☐

Overige ☐

Overige

B15. Hoe heeft u zich opgeleid in het gebruik maken van PRP?

- [ ] Via collega's
- [ ] Via congressen / lezingen / workshops
- [ ] Overige

Overige

B16. Welke problemen ondervindt u bij het gebruik van PRP binnen de huisartsenpraktijk?

Sectie A: Patiëntengegevens

Om de data te kunnen analyseren tussen verschillende patiëntenpopulaties vragen we enkele zaken met betrekking tot uw persoon. Deze gegevens worden geanonimiseerd en opgeslagen in een beschermde databank.

A1. Wat is uw leeftijd?

- [ ] 25-35 jaar
- [ ] 36-45 jaar
- [ ] 46-55 jaar
- [ ] 55+ jaar
- [ ] Overige

Overige

A2. Wat is uw geslacht?

- [ ] Man
- [ ] Vrouw
- [ ] Wens ik niet te specifiëren

A3. Via welke huisartsenpraktijk werd u benaderd om deel te nemen aan deze vragenlijst?

Sectie B: PRP gebruik

Met dit tweede deel van de vragenlijst willen we peilen naar uw beleving van het PRP gebruik binnen de huisartsenpraktijk?

! Deze vragen gaan enkel over een inspuiting van PRP in het kniegewricht voor de behandeling van knieartrose !

B1. Welke behandelingen voor knieartrose kreeg u reeds voor het gebruiken van een PRP inspuiting?

- [ ] Kinesitherapie
- [ ] Cortisone inspuiting in het kniegewricht
- [ ] Hyaluronzuur inspuiting in het kniegewricht

Geen voorgaande behandeling ☐

Overige ☐

Overige

B2. Hoeveel tijd was er tussen de start van de eerdere behandeling en de eerste inspuiting van PRP in het kniegewricht? (tracht zo precies mogelijk te zijn)

B3. Hoe tevreden bent u van de PRP behandeling die werd gebruikt voor de behandeling van uw knieartrose? Geef een score op 10. (1 = helemaal niet tevreden, 10 = kan niet meer tevreden zijn)

B4. Wat was de pijnscore op verschillende momenten van de behandeling (PRP) ? (1 = geen pijn, 10 = meeste pijn die je kan inbeelden)

	1	2	3	4	5	6	7	8	9	10
Pijnscore net voor de behandeling	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pijnscore in de eerste uren na de behandeling	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pijnscore 2 dagen na behandeling	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pijnscore 2 maanden na behandeling	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pijnscore 6 maanden na behandeling	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

B5. Na hoeveel tijd merkte u voor het eerste maal beterschap na de PRP infiltratie? Duid het meest passende antwoord aan.

- [ ] Na enkele dagen (2-3 dagen)
- [ ] Na een week
- [ ] Na een maand
- [ ] Na 2-3 tal maanden
- [ ] Na 6 maanden
- [ ] Nooit verbetering opgemerkt na de infiltratie
- [ ] Overige

Overige

B6. Rookte u dagelijks in de laatste weken voor de PRP inspuiting?

- [ ] Ja
- [ ] Nee

B7.

Hoe goed bent u ingelicht dat u tijdelijk geen ontstekingsremmers (brufen, diclofenac,...) mocht nemen voor en na de procedure?

Paracetamol / Dafalgan hoort niet bij de groep ontstekingremmers !

- [ ] Helemaal niet
- [ ] Onvoldoende
- [ ] Matig
- [ ] Goed
- [ ] Uitstekend

B8. Heeft u 2 weken voor of 8 weken na PRP inspuiting ontstekingsremmers genomen?

- [ ] Ja
- [ ] Nee
- [ ] Onzeker

B9. Welke nevenwerkingen / complicaties ervaarde u na de behandeling met PRP?

- [ ] Meer pijn na de infiltratie
- [ ] Hematoom / bloeding ter hoogte van de punctieplaats
- [ ] Infectie van de punctieplaats
- [ ] Overige

Overige

B10. Zou u nog eens gebruik maken van een PRP infiltratie in de toekomst voor knieartrose? (1 = geen denken aan, 10 = absoluut)

	1	2	3	4	5	6	7	8	9	10
geef een score van 0-10	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

B11. Zou u dit aanraden aan vrienden of familie indien zij aan knieartrose lijden? (1 = geen denken aan, 10 = absoluut)

	1	2	3	4	5	6	7	8	9	10
geef een score van 0-10	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐