PRP for Hip Osteoarthritis

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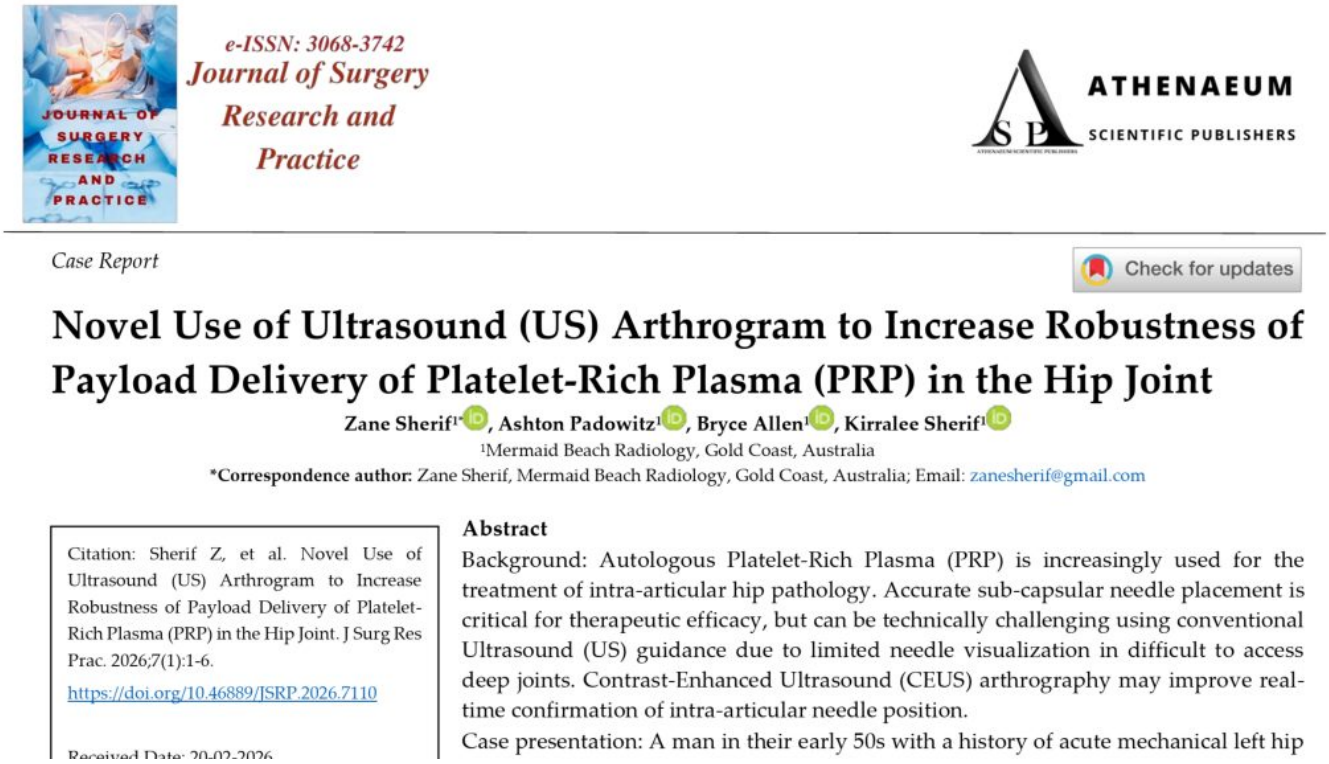

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Case Report

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Novel Use of Ultrasound (US) Arthrogram to Increase Robustness of Payload Delivery of Platelet-Rich Plasma (PRP) in the Hip Joint

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Abstract

Background: Autologous Platelet-Rich Plasma (PRP) is increasingly used for the treatment of intra-articular hip pathology. Accurate sub-capsular needle placement is critical for therapeutic efficacy, but can be technically challenging using conventional Ultrasound (US) guidance due to limited needle visualization in difficult to access deep joints. Contrast-Enhanced Ultrasound (CEUS) arthrography may improve real-time confirmation of intra-articular needle position.

Case presentation: A man in their early 50s with a history of acute mechanical left hip

Hip joint pain can come from arthritis, tendons, bursae, the spine or referred pain. This guide explains where image-guided PRP may fit.

Key message: A painful hip is not automatically an arthritic hip. The first job is to confirm whether pain is truly coming from the hip joint before placing a biologic treatment into it.

What is hip osteoarthritis?

Hip OA involves degeneration of the articular cartilage and other joint structures, often causing groin pain, stiffness, reduced rotation and difficulty walking, climbing stairs or putting on shoes. However, lateral hip tendon disease, iliopsoas pathology, labral disease, lumbar nerve irritation and referred pelvic pain can produce overlapping symptoms.

Can PRP help hip osteoarthritis?

Hip and knee osteoarthritis are anatomical expressions of the same osteoarthritis disease process: a heterogeneous whole-joint disorder involving articular cartilage, synovium, subchondral bone and altered joint mechanics. The proposed biological actions of PRP—modulation of the intra-articular inflammatory environment and delivery of platelet-derived signalling proteins and growth factors—are therefore mechanistically relevant in both joints; the biology is not unique to the knee. However, mechanistic similarity does not allow knee trial results to be automatically transferred to the hip. Direct hip evidence is smaller. A recent meta-analysis of seven studies involving 465 patients found a statistically significant pain advantage for PRP over hyaluronic acid at 6 months, while other outcomes and reviews remain heterogeneous. The most accurate conclusion is therefore that hip OA has a similar biological rationale and an increasingly supportive clinical signal, but with lower certainty than knee OA because fewer hip-specific trials have been performed. [5–7]

Why diagnosis matters before a hip injection

Because the hip joint is deep, an injection may be technically successful but clinically unhelpful if the main pain source is a gluteal tendon, lumbar nerve, sacroiliac joint or another structure. X-ray can assess joint-space loss and bony change; MRI can evaluate cartilage, marrow, labrum, tendons and other soft tissues; ultrasound can assess gluteal tendons and guide selected procedures.

Why image guidance is essential

The hip joint is not a sensible for blind injection. Ultrasound or CT guidance allows the proceduralist to visualise or localise the joint, plan a safe route around vessels and nerves and confirm final needle position. The guidance method should be selected for the patient and the target—not simply because it is the only modality available at a clinic.

What should I expect after hip PRP?

The hip may feel sore or stiff for several days. Walking is usually kept comfortable and heavy is reduced initially. Rehabilitation then focuses on hip strength, gait, range of motion and the mechanical contributors to symptoms. Improvement is assessed over weeks to months.

When should surgery or another pathway be considered?

Advanced joint destruction, major loss of mobility, severe night pain, rapidly progressive symptoms or failure of appropriate non-surgical treatment may make orthopaedic review more useful than repeated injections. Pain outside the joint should be treated according to the actual diagnosis.

Frequently Asked Questions

Can PRP replace a hip replacement?

No. PRP may improve symptoms in selected patients, but it cannot reliably reverse advanced structural arthritis or guarantee that surgery will not eventually be required.

Is hip PRP painful?

The procedure uses local anaesthetic for the skin and is performed with image guidance. A pressure sensation or temporary post-procedure flare can occur.

Why might I need MRI if my X-ray already shows arthritis?

Because X-ray can show arthritis without proving that arthritis is the only pain source. MRI can identify competing pathology such as tendon tears, marrow change, labral disease or other causes that may alter treatment.

Important: Acute inability to bear weight, fever, severe unexplained night pain, major trauma or rapidly worsening symptoms require medical assessment before elective regenerative treatment.

Related MBR Health resources

- PRP
- Joint Pain & Osteoarthritis
- 3T MRI
- Ultrasound
- Why Image-Guided PRP Matters
- PRP Aftercare

Related Patient Guides

Explore the complete MBR Health condition-specific PRP patient-guide series:

- PG8000 – PRP for Knee Osteoarthritis
- **PG8001 – PRP for Hip Osteoarthritis (this guide)**
- PG8002 – PRP for Shoulder Tendon and Rotator Cuff Problems
- PG8003 – PRP for Tennis Elbow and Golfer's Elbow
- PG8004 – PRP for Achilles Tendinopathy
- PG8005 – PRP for Plantar Fasciitis
- PG8006 – PRP for Gluteal Tendinopathy and Greater Trochanteric Pain
- PG8007 – PRP for Hamstring, Adductor and Tendon Injuries
- PG8008 – PRP for Ligament Injuries
- PG8009 – PRP for Meniscus and Cartilage-Related Knee Pain
- PG8010 – PRP for Sacroiliac Joint Pain
- PG8011 – PRP for Facet Joint Pain
- PG8012 – PRP for Disc-Related Back Pain
- PG8013 – PRP for Neck Pain and Cervical Spine Conditions
- PG8014 – PRP for Foot and Ankle Pain

For other FAQs, please visit the MBR Health FAQs page.

References

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Comparing the Best Hip PRP and Precision Hip Pain Clinics on the Gold Coast and Brisbane?

Patients looking for advanced hip arthritis treatment should ask whether the clinic can distinguish true intra-articular hip pain from gluteal tendon disease, spinal referral and other mimics. MBR Health combines high-resolution imaging with specialist radiologist-led ultrasound or CT-guided intervention, allowing patients from the Gold Coast, Brisbane and across South East Queensland to access a diagnosis-first regenerative pathway rather than a generic hip injection.

General information only. PRP suitability, medication changes, dosing, procedure choice and rehabilitation require individual clinical assessment. Evidence and regulatory requirements continue to evolve.

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