

AGE MANAGEMENT MEDICINE

PRP JOINT TREATMENT PROTOCOL

Dr. Berry views *Regenerative Medicine* as part of Age Management Medicine. She views *Regenerative Medicine* as the future and *Platelet Rich Plasma Therapy* is naturally regarded as a form of Regenerative Medicine.

What is Platelet Rich Plasma Therapy (PRP)?

Blood is composed of plasma, red blood cells, white blood cells and platelets. Dr. Berry draws blood, uses a state of the art centrifuge and separates off the platelet rich plasma which is rich in growth factors which are important in the healing process.

PRP can be used to treat a variety of musculoskeletal problems such as osteo-arthritis of the knee or shoulder joint, tendon injuries and rotator cuff injuries of the shoulder.

Platelet Rich Plasma (PRP) for the treatment of knee Osteo-arthritis.

This is what the research suggests:

One study looked at 261 patients with osteo-arthritis of the knee joint who were treated with PRP injected into the knee joint. 6 months after the treatment, there were improvements in function and quality of life.

(Infiltration of plasma rich in growth factors for osteo- arthritis of the knee, short-term effects on function and quality of life. Arch Orthop Trauma Surg. 2011 Mar;131 (3): 311-7. Epub 2010 Aug 17. Wang-Saegusa A,Cugat R, Ares O, et al.)

Other research sought “to evaluate the clinical effects of intra articular platelet rich plasma (PRP) injections in a small group of patients with primary and secondary osteo-arthritis. Most of the current treatments are palliative and attack the symptoms rather than influencing the biochemical environment of the joint. Autologous platelet rich plasma has emerged as a treatment option for tendinopathies and chronic wounds.....The study demonstrated significant and almost linear improvements in Knee injury and Osteoarthritis Outcome Scores, including pain and symptom relief.”

(Injection of platelet rich plasma in patients with primary and secondary knee osteo-arthritis: a pilot study. Sampson S, Reed M, Silvers H, et al. American Journal of Phys Med Rehabil. 2010 Dec;89 (12):961-9.)

There is a long held belief by many doctors that cartilage is a tissue that cannot regenerate itself.

Precursor cells have been found within normal cartilage that can mature into *new cartilage*. Molecular signaling factors that attract these precursor cells, known as ***Chondrogenic Progenitor Cells (CPCs)*** have been identified from the surrounding healthy tissue which can help them develop into normal, *new cartilage*.

For those of you who are interested, Dr. Berry suggests reading the May 2015 issue of Arthritis and Rheumatology.

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Dr. Berry requests that all new clients complete a confidential medical questionnaire. This includes details of all Orthopaedic procedures/operations, xrays and MRI exams & physio, also all current medications (including Warfarin) and allergies. This includes past medical history such as Diabetes, hypertension etc in addition.

Prior to the first consultation, Dr. Berry requests that a new client provides all documentation from a Consultant Orthopaedic surgeon, if indeed the client has been seen by a specialist. Dr. Berry also requires all clients for Knee PRP to have had an up to date MRI scan of the knee joint. She requires this to be sent prior to the face to face consultation. Alternatively, these reports can be brought to the first consultation but better use of time is made if these can be sent beforehand.

The first consultation consists of a 45-60 minute consultation during which time Dr. Berry will evaluate a client's symptoms, examine the affected joint and decide if PRP treatment is appropriate. Symptoms such as pain, stiffness, joint swelling, limp, effect of pain on sleep and quality of life will be discussed in detail. Dr. Berry is particularly interested in what a new client has had to stop doing due to his/her joint problem which has impacted quality of life. She is also particularly interested in any depressive feelings that the joint problem may have generated and also if the client has had to reduce or amend work hours as a result of the joint problem. Dr. Berry will explain the science behind the treatment in more depth at this consultation and give the client an opportunity to ask questions. She will explain exactly what to expect on the day of the treatment works and is happy to discuss any concerns. A new client would not ordinarily receive a treatment at this first consultation, however exceptions can be made.

If PRP treatment is appropriate, the treatment consists of 3 injections of PRP at approximately 4 week intervals and thereafter 1-2 maintenance injections each year.

It is to be noted that the PRP injection does ***not*** include a local anaesthetic mixed in with the treatment as with a steroid joint injection. Dr. Berry prefers that the platelets and growth factors are ***pure*** and not contaminated with a drug. In addition, Dr. Berry is an experienced physician and has performed many joint injections. The injection itself is fast and so she feels that a local anaesthetic is unnecessary.

Prior to the face to face appointment, Dr. Berry requests the patient complete a ***WOMAC score*** questionnaire form which can be completed confidentially on line or can be downloaded, completed and brought along to the face to face consultation. ***WOMAC*** is an international Orthopaedics scoring system which looks at the degree of pain, stiffness and the interference with quality of life

etc. Dr. Berry requests all new clients complete a base line questionnaire prior to treatment and then to repeat it at 6 months after treatment. This helps her to evaluate the success of the treatment.

The day of the treatment will need to be planned with care as it is necessary to rest the joint for 48 hours after the treatment. Please bring a pair of shorts to this appointment. Do consider your journey home. If one has to travel a considerable distance, a friend or family member may need to be arranged to drive the client home to facilitate resting of the joint.

A pre- treatment e mail (if this is an acceptable means of communication) will be sent to all new clients one week prior to a treatment reminding clients what to expect, confirming the place and time of appointment and to include ***post care written instructions***. The latter will be discussed on the day of treatment also.

Dr. Berry contacts the patient one week later by e mail or phone with regards to the treatment.

Post treatment care.

In addition to resting of the joint for 48 hrs post procedure, it is necessary to avoid weight bearing activity for 1 week, that includes gym work outs and running. Gentle walking is acceptable after the initial 48 hour period.

Also for 48 hours after the procedure it is advisable to avoid the use of a Jacuzzi, bath and not to swim to minimize the risk of an infection.

Potential side effects include pain at the site of injection, a “post inflammatory flare” that is a temporary increase in pain for approximately 48 hours post procedure and infection.

The latter problem, that of infection is indicated by a hot, red, painful joint. This is an emergency and Dr. Berry needs to be notified of this complication asap. She is always contactable by e mail or text details of which will be given to all new clients on the day of treatment. This is something that requires urgent treatment. Antibiotic treatment must never be delayed. Dr. Berry has never experienced this complication but in the event of this occurrence, a client can attend a local A &E department (week end) or alternatively obtain an urgent appointment with his/her GP.

Pain relief

Dr. Berry prefers one does not take anti-inflammatory medication such as Ibuprofen/Naproxen/Diclofenac pre or post procedure.

The PRP treatment itself has an ***anti-inflammatory effect but not immediately.***

2 hours prior to the treatment, one can take 2 paracetamol if not allergic or 2 co-codamol from over the counter if not allergic to codeine.

Alternatively, if one has been prescribed Codeine already from their GP for pain say in the dose of 15 mg or 30mg, or has been prescribed Co-codamol by their GP, 1-2 tablets can be taken 2 hours prior to a treatment. If taking Codeine, care is necessary with regard to it's sedative side effect and with respect to driving.

If necessary, the above medication can be taken post procedure for 24-48 hrs. However, most clients need no pain relief post procedure.

IMPORTANT INFORMATION:

IT IS ESSENTIAL FOR ANY CLIENT ON WARFARIN, THAT THE INR BLOOD TEST IS WITHIN THE RANGE OF 2-2.5. 2.5 BEING THE PREFERRED INR READING.

IT IS ESSENTIAL THAT ANY DIABETIC PATIENT IS WELL CONTROLLED TO MINIMIZE THE RISK OF POST PROCEDURE INFECTION. DR. BERRY IS HAPPY TO DISCUSS THIS ISSUE IN ADVANCE OF ANY TREATMENT APPOINTMENT.

DISCLAIMER: PRP therapy is a treatment modality that is not considered mainstream. Results are individualized and can vary from person to person. Dr. Berry will discuss any concerns that a patient may have prior to treatment so that a patient gives true informed consent. There are naturally no guarantees to healing.