ORTHOSPORTS

QUESTION FOR PHYSIOTHERAPISTS

1. **What is the ideal amount of times that a tendinopathy should be injected with PRPP to get the best results?**

   Many patients get significant improvement after a single injection. If there is no improvement then there is little point in repeating the injection. Often if a patient has partial but not complete improvement then a second injection may give further improvement. Generally this is enough, but there is the potential to progress to a third injection if there has not been complete symptom resolution.

2. **Whats your view on prolotherapy – PRPP vs prolotherapy?**

   I think there is a role for many different potential injection therapies for the treatment of tendinopathy, as it can be a frustrating condition to treat with prolonged time frames to improvement. I don't personally have a lot of experience in the use of prololtherapy, although there is some literature to support its use. It provides a treatment alternative, but PRPP seems to be more reliable.

3. **Why do you think the lower limb PRP injections are not as effective as upper limb with regards to your personal findings?**

   Possibly as they have less potential for complete rest than upper limb conditions. The difference in improvement isn't really that great overall.

4. **Does success in 70% of patients mean 100% improvement, or just some improvement?**

   Overall improvement, but not necessarily complete. I use a VAS scale greater than 50% to define improvement. When PRP is helpful the trend is generally for further improvement with time.

5. **If PRP is not successful, is there any problem with going down the cortisone path?**

   No, there is no contra-indication to that as a means of exhausting all methods of conservative care.

6. **What frequency and how many PRPP injections do you do?**

   I generally perform a single injection and review at 2 months, with a view to a follow-up injection if there has been a partial, but not complete improvement

7. **Considerations physios should have in their treatment for patients PRP injections for tendinopathy?**

   There are no specific considerations. The patients may have significant pain for 2-3 Days afterwards, and the PRP takes around 2 weeks to begin working. I tell patients that their rehabilitation exercises can commence as soon as the acute pain settles.

8. **Do you inject into the tendon or surrounding?**

   The injection is a combination of peri-tendinous, but also intra-tendinous if they have a hypoechoic region or partial tear on ultrasound

9. **How long would you recommend conservatinbe Mx/physio before trying PRP injection?**

   This is influenced by many factors, including the acuteness of symptoms, amount of pain, duration of symptoms, etc. Generally I would suggest a minimum of 3 months

10. **Do you use PRPP for joints?**

    Yes, as per the presentation PRP has a clear indication in the treatment of OA in the younger patient, as per the work of Patel.

11. **What is the selection criteriea for PRPP? Does it work for rheumatoid arthritis in young adults?**

    The selection is basically chronic tendinopathy recalcitrant to other forms of treatment. It may have more benefit in tendons with more significant pathology such as degenerative or partial tearing. It has no role in the management of inflammatory joint disease.

12. **What is the cost comparison of cortisone/autologous blood / PRP injections?**

    PRP is more expensive in my practice as I use a commercial kit to more adequately separate the blood into its various components. This method regularly gives platelet counts 10-12 times greater than baseline, which is a significant difference for simple spin procedures and I feel worth the additional cost.

13. **After PRP injection do they have follow up physio and how long after the injection do they start?**

    Follow-up physio is important to treat soft tissue abnormalities and to commence appropriate rehabilitation exercises. This may occur as soon as the acute pain is settling down, generally within the first 1-2 weeks

14. **What % of patients have an adverse reaction to PRP? Can you determine those patients that may have an adverse reaction?**

    Almost every patient develops post-injection pain as the purpose of PRP injections is to create an inflammatory reaction to stimulate healing. The degree of pain is hard to determine and is different in all patients. Prescription of adequate post-injection analgesia is essential, as well as the use of ice. It is more common in tighter tissue spaces such as tennis elbow and plantar fascitits. Aside from pain there is little downside for the use of PRP in terms of adverse reaction.

15. **Is there an increased risk of post procedural infection or any other longer term increased likelihood of antibiotic resistant staph infections from PRP?**

    The risk of infection after any injection is low, quoted at rates of less than 1:20-30,000 cases and quite uncommon with the use of appropriate sterile technique.

16. **Is shockwave therapy effective? What is the protocol post PRP injection? Rest? Physio? Average cost?**

    Shock wave treatment may have some efficacy in certain tendon conditions, especially where calcification is involved. There is good evidence for calcific supra-spinatus tendinopathy, plantar fasciitis, and some evidence for insertional Achilles tendinopathy. For other questions please see above.

17. **Do all the post PRP symptoms resolve eventually, especially with the patients where the procedure has been unsuccessful? ie: can the patient be made worse?**

    I have not had a patient made worse overall after a PRPP injection. The worst case scenario is worsened initial pain which resolves back to its original pre-injection level with no overall improvement.

18. **How many CSO or PRPP is enough? When do you stop?**

    Generally no more than 3 PRP injections are required, although, as with cortisone there are no hard and fast rules with this. If there has been no improvement then there is little benefit from pursuing further treatments, but likewise if each treatment has been helpful and there is continued improvement then a case could be made for further injections.

19. **When/why would you choose cortisone in treatment of a tendonopathy (eg tennis elbow/Achilles) as opposed to PRPP?**

    This is a decision based on patient presentation and expectations, as discussed on the day of the talk. A patient with more severe pain or with a specific short term goal may be better for a cortisone injection. A patient with chronic symptoms, higher specific functional requirements (manual worker/elite athlete), or more significant tendon damage (partial tear) may be better for PRP. I try to avoid cortisone in large weight-bearing tendons (Achilles/patella tendon) where possible

20. **Are PRPP injections more/less successful in certain patient groups? Eg: older vs younger, active vs less active? Do you prescribe a rehab programme post PRPP injection?**

    There is no patient group where PRP can be considered more or less successful, based on the literature or my experience. Rehab programs are essential post injection

21. **With PRPP injections for tendinopathy, are there any restrictions to physiotherapy treatment afterwards?**

    There are no restrictions. Once the acute pain settles then normal treatment can proceed, hopefully with the benefit of improved pain and function

22. **Does PRP have a role in Ehlers-Danlos patients?**

    No