



ROLE OF PRP INJECTION IN OSTEOARTHRITIS OF KNEE JOINTS

Orthopaedics

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ABSTRACT

Recently PRP has been extensively explored as a chondro-protective treatment for symptomatic knee OA⁸. Our study demonstrated improvement in functional outcomes and protects the articular cartilage from further wear and tear in patients with knee OA.

KEYWORDS

knee pain, osteoarthritis, PRP

INTRODUCTION

Platelet-rich plasma (PRP) is an experimental treatment that may reduce pain from osteoarthritis. It uses ingredients from own blood to treat damaged tissues. Early trials have shown promising results, but experts do not currently recommend its use.

Platelet-rich plasma (PRP) is a concentrate of autologous blood growth factors which has been shown to provide some symptomatic relief in early osteoarthritis (OA) of the knee. The objective of this study was to test the efficacy of platelet rich plasma (PRP) in primary care.

METHODS

20 patients with OA grade 1 to 3 selected on randomly basis. All participants received three injections of PRP 4 weeks apart. The following self-reported clinical outcomes were evaluated before and after therapy (4 months): Pain and disability (ICOAP questionnaire); health utility (EUROQol); adverse events; patient satisfaction and goal-orientated outcomes.

RESULTS

Twenty consented and completed the intervention and all outcome measures. There were no losses to follow-up. One patient reported pain and stiffness for 2 days after the first injection but did complete the study. No growth was detected from nine consecutive samples sent for microbiology analysis. Changes in constant, intermittent and total pain scores were reported; pain fully resolved in five patients. In addition, health utility, patient satisfaction and goal-orientated outcomes also demonstrated improvement.

CONCLUSIONS

Platelet-rich plasma therapy is a simple and minimally invasive intervention which is feasible to deliver in primary care to treat osteoarthritis of the knee joint. Well-designed randomised controlled trials are needed to measure outcomes, durability of effect and cost effectiveness.

Key messages

- Platelet-rich plasma (PRP) is a concentrate of autologous blood growth factors.
- PRP has been shown to provide some symptomatic relief in knee osteoarthritis.
- To date, this intervention has been largely delivered in hospital settings.
- This study has shown that it is feasible to deliver PRP therapy in primary care.
- This therapy appears to have minimal associated adverse events.
- This therapy appears to be associated with improvements in patient outcomes.

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