Platelet-Rich Plasma (PRP) to treat upper patellar tendinopathies


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Introduction
Introduction

- Patellar tendinopathy = jumper’s knee
- Often rebel to conservative treatments
- Positive effects of platelets on the healing process of tendons recently demonstrated
- PRP: rich in growth factors
- Local infiltration of PRP: potentiallity to enhance the tendon healing process
- PRP removed from the list of doping treatments
- From autologous blood
- 3 sedimentation phases
- Upper part of «buffy coat»
Aim of our study

- To investigate the effect of 1 injection of PRP in patients suffering from chronic jumper’s knee
Methods
Methods

- 18 patients with chronic jumper’s knee, rebel to conservative treatment
- Clinical examination + algometer
- Functional assessments (isokinetic and opto-jump)
- Imagery (US and MRI)
- Follow-up: 6 weeks
Methods

- PRP obtained with apharesis system (COM.TEC)
- Infiltration of 6mL
- No local anaesthetic
- 48h rest-time
- No NSAIs
- After 1 week ➔ 5 weeks of submaximal eccentric reeducation (3 times a week)
- Porocol approved by Ethic Committee
Results
IKDC

Analyse scores IKDC

<table>
<thead>
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<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
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<th>P11</th>
<th>P12</th>
<th>P13</th>
<th>P14</th>
<th>P15</th>
<th>P16</th>
<th>P17</th>
<th>P18</th>
<th>Moyenne</th>
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Isokinetic

- Patient 1
- Patient 3
- Patient 5
- Patient 7
- Patient 9
- Patient 11
- Patient 13
- Patient 15
- Patient 17
- Moyennes

Newton mètres
Opto-jump - CMJ
Imagery

- No significant difference in US and MRI
- Too early?
Discussion
Discussion

• 1 injection of PRP in situ → improvement of jumper’s knee (6 weeks)
• ↓ pain
• No significant difference for functional performances nor imaging
• Follow-up at 3 months in process
Conclusion
Conclusion

- PRP infiltration can relieve pain in the case of rebel jumper’s knee in the short term
- More long term follow-up in process
Thank you for your attention!
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http://hdl.handle.net/2268/126408