

Placental Tissue Matrix

A2M PRP

Case Report

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Diagnosis

Tendinosis of the quadriceps tendon and patellar tendon, and medial meniscal degeneration and medial joint line spurring of the right knee

Intro

Patient is a 35-year-old male who has had six years of right knee pain, which started after falling on his knee when he was carrying a box. His knee was initially treated with aspiration, a cortisone injection, and physical therapy. Patient had another similar contusion to the knee four years ago. This year, his knee has become significantly worse, where it will “give out” and become significantly swollen and stiff after a day of walking. His pain is in the front of the knee, and is worse when descending stairs.

His MRI report of the right knee on June 15, 2016 showed the following:

1. No meniscus tear
2. Low grade strains of the popliteus and soleus muscles
3. Common peroneal nerve prominent posteriolaterally
4. Tri-compartmental articular cartilage loss moderate in the mediofemoral tibial compartment and patello-femoral compartment

5. Altered patellar tracking
6. Lateral patellar tilt and subluxation
7. Large joint effusion with synovitis and small articular loose bodies

Dr. Tierney used a B-mode ultrasound with 8 to 13MHz high frequency GE 12L linear transducer to perform an additional diagnostic exam. The ultrasound revealed the additional following findings:

1. Synovial hypertrophy and effusion of the right knee suprapatellar pouch
2. Laxity of the right lateral collateral ligament
3. Normal proximal popliteus tendon
4. Loss of fibers in medial collateral ligament
5. Tenderness and loss of fibers in the quadriceps and patellar tendon insertion
6. Mild lateral tracking of the patellar tendon
7. Medial joint spurring with loss of thickness of the right medial meniscus

Patient agreed to the clinicians' recommendations of the Alpha-2 Macroglobulin Platelet-Rich Plasma (A2M PRP) treatment, in hopes of healing of his knee injury, decrease his pain, and return to playing basketball.

Treatment

100cc of blood was harvested intravenously from the patient and processed to produce 24 cc of platelet rich plasma.

Under ultrasound guidance, a needle injected the right distal quadriceps tendon, the right patellar tendon, the coronary ligaments, the medial collateral ligament, the medial meniscus and the supra patellar pouch with A2M PRP.

Cover roll and Leukotape were then applied to the right knee, to stabilize the knee. Tape was maintained for the next six weeks.

Follow-up

Four weeks after the treatment, upon exam with Carol Hanselman, Nurse Practitioner, patient reported major relief from the right lateral knee. He only noticed a slight amount of fluid in the right knee in the front, but only minimal soreness and tightness. Walking and light exercise makes it feel better the next day.

At the two-month follow-up appointment on August 23, 2016, the patient reported major relief overall, with minimal to no swelling. His knee has not felt this good in six years, before his initial injury. On ultrasound exam, the quadriceps tendon and proximal patellar tendon tendinosis was visibly and symptomatically resolved, with visualization of increased density of tendon fibers. Additionally, medial meniscal degeneration with medial joint line spurring was symptomatically resolved and not noted on ultrasound exam. Patient was recommended to continue physical therapy and begin playing basketball and activity as tolerated.

Figure 1. Patient's Self-Reported Pain on a 1-10 Scale, before and after receiving A2M PRP

Level of Pain	Pre- A2M PRP	Post- A2M PRP
	6/30/16	8/23/16
Average Pain	2	1
Worst Pain	8	3