

Utilization of a Next Generation Decellularized Dermal Allograft to Augment a Patellar Tendon Debridement and Repair

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Surgical Summary

Clinical Presentation:

- 15-year-old female previously diagnosed with left sided patellar tendinitis presents with continued pain in the left knee that bothers her anteriorly on a daily basis.
- Symptomatic and has failed all conservative treatment: physical therapy, immobilization, and anti-inflammatory medications. Pain with active extension and resistance to flexion.
- Examination:
 - Left knee tender over the patellar tendon, at the insertion of the inferior pole of the patella. No instability noted through the patella itself. The patella tracks appropriately.
 - Varus Valgus stress test, equivocal
 - McMurray's positive with pain medially and laterally
 - Lachman's and anterior / posterior drawer, and pivot shift all negative
 - Compartment soft, grossly sensate distally with antalgic gait
- Previous medial patellofemoral ligament (MPFL) reconstruction (without issue at time of examination). Incision clean, dry, intact and well healed.
- MRI reveals patellar tendinitis at the insertion of the inferior patellar pole.
- Planned surgical intervention: Debridement of the insertion of the patellar tendon with trephination and allograft placement for reinforcement.

Intraoperative Findings:

- Degenerative Patellar Tendon. (Figure 1)



Figure 1

Surgeon Perspective:

"DermaPure is available in multiple sizes, providing me with flexibility when using it to reinforce tendon repairs."

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Surgical Procedure:

- A direct anterior incision was made over the patellar tendon insertion on the patella, and using sharp and blunt dissection, the paratenon was identified. The paratenon was incised and dissected medially and laterally, and the patellar tendon was incised centrally visualizing the degenerative area.
- Sharply debrided the patellar tendon with a rongeur and knife, until clean and viable. The distal aspect of the patella was scraped to bleeding.
- Repair of the patellar tendon side-to-side, with interrupted #0 Vicryl[®] sutures. To reinforce this repair and to augment angiogenesis, a 2cm x 3cm DermaPure[®] decellularized dermal allograft was utilized, securing through the patella and the patellar tendon with interrupted #0 Vicryl[®] sutures. (Figure 2)
- Next, the paratenon was repaired over this with interrupted #0 Vicryl[®] sutures. The subcutaneous tissue was repaired with interrupted 2-0 Vicryl[®] sutures, and the skin was closed with staples. (Figure 3)
- The leg was then sterilely cleaned, dressed with xeroform, wrapped with a 4x4 soft roll gauze, and an ace wrap. She was placed in a knee immobilizer in full extension and transferred to recovery in stable condition.

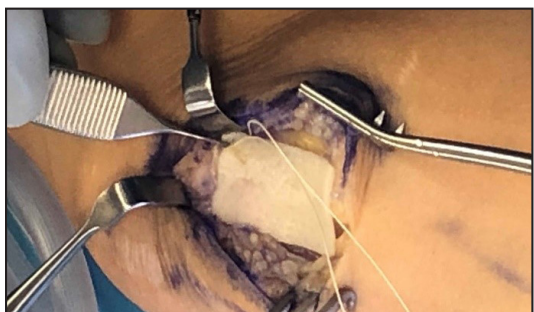


Figure 2



Figure 3

2 cm x 3 cm DermaPure[®]

Basement Membrane Side
Outermost

Post-Operative Note:

- Discharged home with orders to return to office for follow-up in 2 weeks.
- Knee immobilizer in full extension with touchdown weight-bearing for 6 weeks.
- Physical Therapy began at 6 weeks, with brace and weight-bearing initiated.
- At 12 weeks patient returned to all activity, pain free.

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