

TO TRANSPLANT OR NOT TO TRANSPLANT? THE SUCCESSFUL TREATMENT OF A LATERAL MENISCUS TRANSPLANT

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BACKGROUND PURPOSE:

Estimates of the amount of meniscal transplants performed are 800 per year¹. It had been proposed that this type of surgery tended to occur in males more often than females². The patients who have received a complete meniscectomy are those that have the meniscal transplant in order to promote proper joint mechanics and prevent degeneration³. The long term effects are still unknown.

The purpose of this case report was to demonstrate how physical therapists can successfully manage a young patient who received the rare lateral meniscal transplant procedure.

CASE DESCRIPTION:

A 29 year old male underwent a left lateral meniscectomy six months prior. After six months, the left knee pain and stiffness persisted, thus the patient received a left lateral meniscus transplant allograft.

International Classification of Functioning:

Lateral Meniscus Transplant

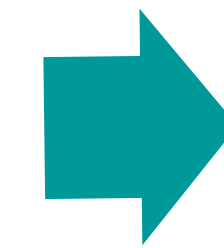
Body Structure/Function
structure/function
decreased strength
abnormal gait mechanics
impaired balance/proprioception

Activity Limitations
sit to stand transfers
difficulty negotiating different terrain
unable to lift objects off ground or negotiate stairs

Participation Limitations
unable to fulfill occupational duties
unable to play soccer
difficulty performing house

METHODS:

Phase 1:
surgery-4 weeks



Phase 2:
6-8 weeks



Phase 3:
when week 2 criteria met

The patient was seen 2-3 times per week over the course of 4 months, while abiding by the rehabilitation guidelines from the University of Miami. The intervention plan included therapeutic exercise, gait training, functional training, and manual therapy. The KNEEHAB was chosen to begin neuromuscular reeducation of the quadriceps muscle. Interventions ranged from low level to advanced level high impact interventions and plyometrics.



RESULTS:

Outcome Measure	Phase 1	Phase 2	Phase 3	Discharge
Left quadriceps strength	Limited palpable contraction	4-/5	4+/5	5/5
Lower Extremity Functional Scale	25/80	61/80	75/80	75/80
Numeric Pain Rating Scale (at worst)	5/10	3/10	2/10	0/10

CONCLUSION

Based on the patient's status at discharge, both the lateral meniscal transplant surgery and the interventions utilized in the clinic were considered effective. The successful lateral meniscal transplantation, as well as the physical therapists rehabilitation allowed the patient to recover and get back to ADLs and sport. The successful outcome of this case report may help physical therapist design and implement rehabilitation pathways for these patients. However, further research is needed to support these claims.

Front view

Top view

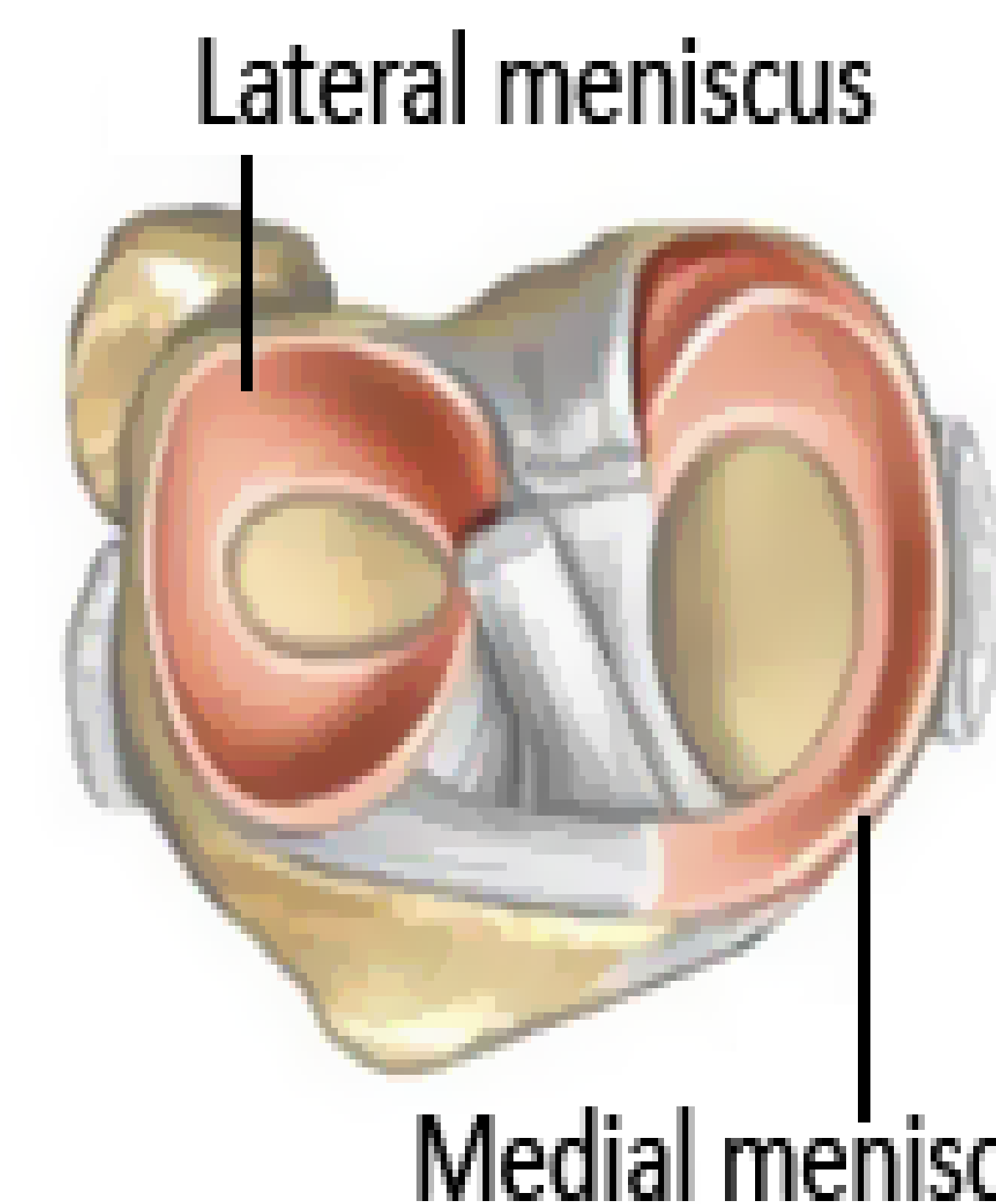
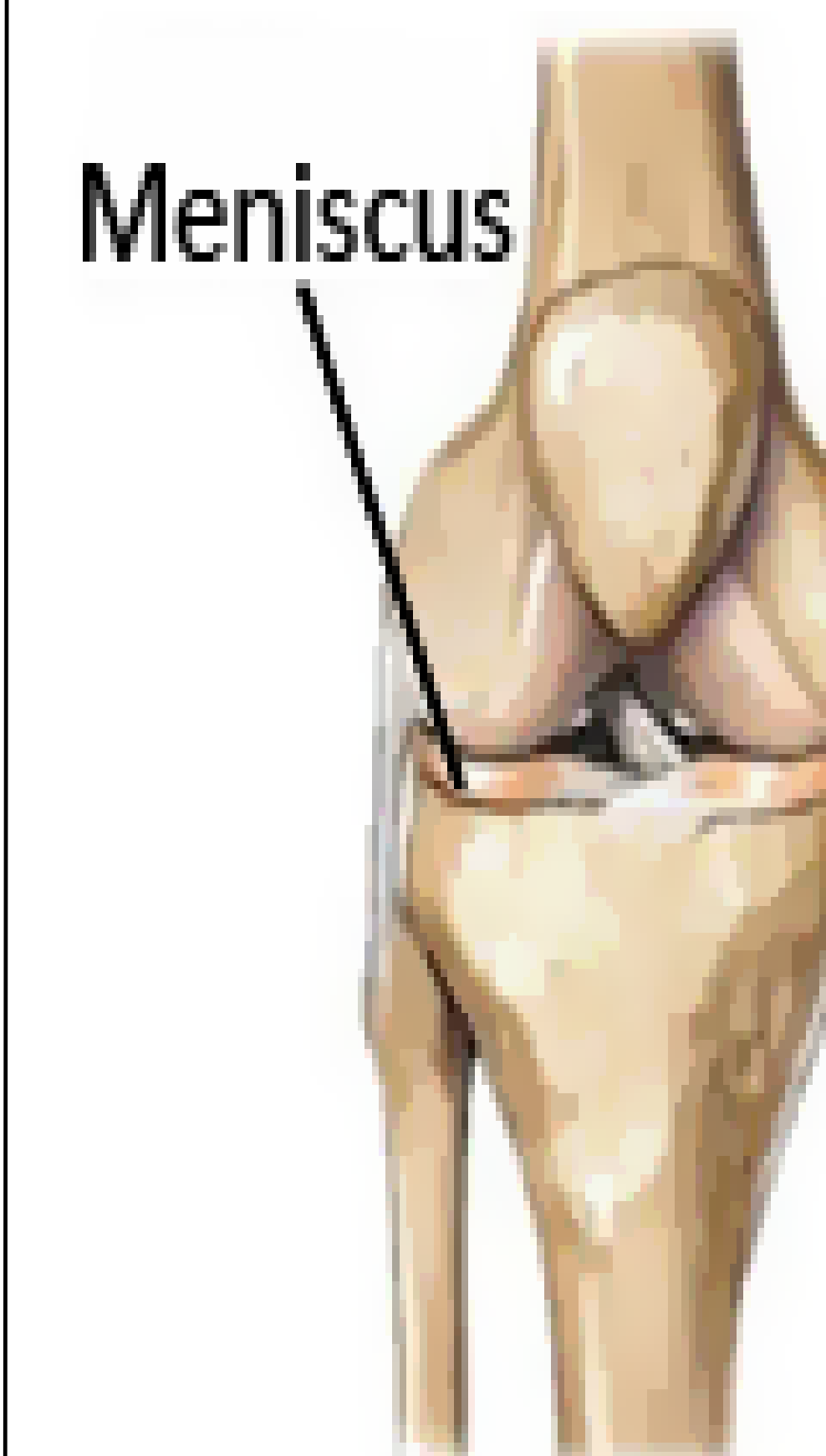


Image from <http://www.theknee.com/>

REFERENCES

