## Knee Rehab after Regenexx primary patella femoral osteoarthritis procedures.

	Restrictions	Therapeutic Exercise	Progress to next phase when:
Phase I: Maximal Protection Week 1	Patella stabilizing brace while weight bearing at all times for 6 weeks.	Passive and active ROM exercises.  Quadriceps isometrics, straight leg raises  Core stabilization.	At least 1 week Able to perform exercises with no more than 2/10 pain.
Phase II: Minimal Protection Mobility and light resistance training Week 1- week 6	Wear brace while weight bearing at all times 6 weeks.  Avoid any activity that causes more than mild 2/10 pain during or after the activity.  Avoid bicycling, deep knee bends, deep squats, resisted knee extension.	If access to a pool; Deep Water emersion exercises: Walking or jogging in pool (chest depth) 30-45min 3-5x/wk x 2 months.  Can do elliptical for exercise.  Cont isometrics. Then add: mini lunges, wall slides, lateral step-ups, mini squats.  Hip abductor and external rotator strengthening.	When able perform exercises with no more than 2/10 pain x 1week.
Phase III: Advanced Resistance Strengthening / Week 6-12	Avoid any activity that causes more than mild 2/10 pain during or after the activity.	Continue pool for 2 months.  Can begin advanced Hamstring strengthening, light bicycling, stair stepping, walking for exercise.  Progress to easy closed chain exercises.	Can perform exercises and walk for exercise with no more than 2/10 pain x 1 week.
Phase IV: Return to Sport/Activity Week 12-26	No strict restrictions.  After 6 weeks can discontinue brace or use for moderate to high impact activities as needed.	Can start jogging and sport specific training Gradual return to full Functional activity. Continue to work on strength, flexibility, correcting poor biomechanics, asymmetry, and postural restoration.	Return to phase III if more than 2/10 pain with most exercises or activities.