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SPORTS MEDICINE & ARTHROSCOPY

Helping you move with less
pain and greater confidence

KNEE OSTEOARTHRITIS (OA)
PRP INJECTION

Post-Injection Rehabilitation Protocol





YOUR RECOVERY MATTERS

Your recovery depends on how closely you follow your care plan.

This protocol is designed to:

- ✓ Support the healing response following PRP injection
- ✓ Reduce pain and joint irritation
- ✓ Improve mobility and movement quality
- ✓ Restore knee strength and function
- ✓ Support a safe return to daily activities

WHAT YOU NEED TO KNOW

- Recovery progresses gradually
- Mild soreness after PRP may be normal
- Improvement may occur over several weeks
- Movement is important
- Strengthening exercises are important
- Activity should be increased gradually
- Recovery varies from person to person

IMPORTANT

- Do not compare your recovery to others
- Do not progress based on time alone
- Progress based on symptoms and function
- Follow guidance from your surgeon or physiotherapist

PRP RECOVERY & EARLY HEALING



WHAT IS PRP?

Platelet-Rich Plasma (PRP)

Uses platelets and growth factors concentrated from your own blood.



EARLY HEALING RESPONSE

It is normal to experience:

- temporary soreness
- stiffness,
- or swelling following a PRP injection.

A temporary inflammatory response may occur as part of the healing process.



EARLY GUIDELINES

- Relative rest for the first 2–3 days
- Take short walks as tolerated
- Avoid prolonged standing or long walks initially
- Avoid impact activities such as running and jumping
- Avoid high-intensity exercise
- Increase activity gradually as symptoms allow
- Avoid NSAIDs unless approved by your physician



REDUCE ACTIVITY IF

- Pain significantly increases
- Walking becomes more difficult or causes limping
- Symptoms remain elevated greater than 24 hours
- Swelling or stiffness continues to worsen
- Night pain becomes significantly worse



Mild soreness and stiffness are a normal part of the early healing response after PRP.

RECOVERY ROADMAP & REHABILITATION



Your recovery progresses through structured phases designed to reduce pain, restore mobility and strength, improve function, and help you safely return to your daily activities.



PHASE 1

RECOVERY & EARLY MOBILITY

Days 1-3

Protect the healing joint, support the healing response, and restore comfortable movement.



PHASE 2

MOBILITY & MUSCLE ACTIVATION

Days 4-14

Restore comfortable movement, restore normal walking mechanics, and gently activate the muscles around the knee.



PHASE 3

STRENGTH & FUNCTIONAL LOADING

Weeks 2 - 4

Build lower-limb strength, improve movement control, and restore everyday function.



PHASE 4

RETURN TO ACTIVITY & SELF-MANAGEMENT

Weeks 4-6+

Gradually return to daily and recreational activities while building long-term habits to maintain joint health

IMPORTANT RECOVERY PRINCIPLES

- Gentle movement supports joint health
- Strength supports joint health
- Progress gradually
- Avoid flare-ups
- Quality movement matters more than speed
- Long-term success depends on ongoing exercise



Following this rehabilitation program and progressing gradually will help support your recovery after PRP treatment.

Phase 1
RECOVERY & EARLY MOBILITY
 DAYS 1-3

PRIMARY PHASE FOCUS

Allow the initial healing response while maintaining gentle mobility, circulation, and comfortable weight bearing.

GOALS



Reduce joint irritation



Maintain knee mobility



Promote circulation



Prevent stiffness



Maintain comfortable walking



Support the healing response

EXERCISES

PURPOSE

HOW TO PERFORM

WHAT YOU SHOULD FEEL

COMMON MISTAKES

DOSAGE/ PROGRESSION



Calf Pumps

Promote circulation and reduce stiffness

Move your foot upward toward your head, then point it away in a slow controlled motion

Gentle movement in the ankle and calf without discomfort

Moving too quickly or forgetting to perform regularly

20–30 repetitions every hour while awake



Heel slides

Maintain knee mobility and reduce stiffness

Slowly slide your heel toward your body, then return to the starting position

Gentle movement around the knee without sharp pain

Forcing motion or pushing through significant discomfort

10–15 repetitions, 2–3 times daily



Seated Knee Flexion / Extension

Encourage gentle knee motion and maintain joint mobility

While seated, slowly bend and straighten the knee through a comfortable range

Mild movement around the knee joint

Moving aggressively or forcing range of motion

10–15 repetitions, 2–3 times daily



Weight Shifts

Improve confidence with weight bearing

While standing, gently shift weight from one leg to the other in a controlled manner

Comfortable loading through both legs

Leaning excessively or shifting too aggressively

10–15 repetitions, 2–3 times daily



Short Walks
 (Weight Bearing as Tolerated)

Promote circulation and maintain functional mobility

Walk short distances at a comfortable pace while maintaining a normal walking pattern

Comfortable movement without limping or significant discomfort

Walking too far too soon or limping significantly

Short frequent walks as tolerated

PROGRESS WHEN

- ☒ Walking comfortably
- ☒ Symptoms remain manageable

- ☒ No significant increase in swelling
- ☒ Weight bearing is tolerated comfortably
- ☒ Knee mobility is improving

Phase 2

MOBILITY & MUSCLE ACTIVATION

DAYS 4-14

PRIMARY PHASE FOCUS

Restore knee mobility, improve walking mechanics, activate surrounding musculature, and introduce controlled strengthening.

GOALS



Restore knee mobility



Improve quadriceps activation



Improve lower-limb control



Normalize walking mechanics



Improve balance and confidence



Prepare for strengthening progression

EXERCISES

PURPOSE

HOW TO PERFORM

WHAT YOU SHOULD FEEL

COMMON MISTAKES

DOSAGE/ PROGRESSION

Scan QR to watch



Heel Slides

Improve knee mobility and reduce stiffness

Slide heel toward body and slowly return

Gentle stretch and movement around the knee

Forcing motion or moving too quickly

10–15 repetitions, 2–3 sets



Quad Sets

Improve quadriceps

Tighten thigh muscle while pressing knee downward

Muscle contraction at the front of the thigh

Holding breath or compensating with other muscles

Hold 5–10 seconds, 10–20 repetitions



Straight Leg Raises

Improve quadriceps strength and lower extremity control

Lift straight leg while maintaining knee extension

Front thigh activation without sharp pain

Bending knee or using momentum

10–15 repetitions, 2–3 sets



Sit-to-Stand

Improve functional strength and daily movement capacity

Stand from chair and return slowly with control

Work through thighs and hips

Using momentum or collapsing while sitting

8–12 repetitions, 2–3 sets



Single-Leg Balance

Improve balance and control

Stand on one leg while maintaining posture

Mild balance challenge and stabilizer activation

Excessive trunk leaning or holding breath

Hold 20–30 seconds, 3–5 repetitions

PROGRESS WHEN

- ✓ Comfortable walking
- ✓ Improved mobility

- ✓ Improved muscle activation
- ✓ Minimal swelling
- ✓ Symptoms controlled

Phase 3

STRENGTH & FUNCTIONAL LOADING

WEEKS 2-4

PRIMARY PHASE FOCUS

Improve strength, endurance, balance, movement quality, and overall functional capacity.

GOALS



Improve quadriceps strength



Improve hip and glute strength



Improve balance



Improve movement quality



Improve activity tolerance



Improve confidence with loading

EXERCISES

PURPOSE

HOW TO PERFORM

WHAT YOU SHOULD FEEL

COMMON MISTAKES

DOSAGE/ PROGRESSION



Mini Squats

Improve lower extremity strength and control

Perform shallow squat while maintaining alignment

Quadriceps and glute activation

Knees collapsing inward or excessive forward lean

10–15 repetitions, 2–3 sets



Step-Ups

Improve functional strength and stair tolerance

Step onto platform and return under control

Glute and quadriceps activation

Poor knee alignment or pushing off opposite leg

8–12 repetitions, 2–3 sets



Step-Downs

Improve eccentric control and balance

Slowly lower from step with control

Controlled quadriceps loading

Dropping too quickly or losing alignment

8–12 repetitions, 2–3 sets



Monster Walks

Improve hip strength and lower limb mechanics

Walk laterally with resistance band while maintaining tension

Strong glute activation

Standing too upright or dragging feet

10–20 steps each direction, 2–3 sets



Stationary Cycling

Improve endurance and low-impact cardio fitness

Cycle at comfortable resistance

Mild cardiovascular effort without symptom aggravation

Excessive resistance too early

Begin 10–15 minutes and progress gradually

PROGRESS WHEN

- ☒ Strength improving
- ☒ Good movement quality

- ☒ Improved endurance
- ☒ Symptoms controlled
- ☒ No significant flare-up after activity

Phase 4

RETURN TO ACTIVITY & SELF-MANAGEMENT

4 - 6+ WEEKS

PRIMARY PHASE FOCUS

Improve endurance, confidence, function, and establish long-term strategies for knee health.

GOALS						
	Return to regular activity	Improve endurance	Improve confidence	Improve function	Support long-term knee health	Establish sustainable exercise habits

EXERCISES	PURPOSE	HOW TO PERFORM	WHAT YOU SHOULD FEEL	COMMON MISTAKES	DOSAGE/ PROGRESSION
 Walking Progression	Improve activity tolerance and endurance	Gradually increase walking duration	Pain, swelling, limping response	Increasing volume too quickly	Gradually increase duration and frequency
 Cycling Progression	Improve endurance and joint mobility	Low-impact aerobic exercise	Knee irritation and tolerance	Excessive resistance too early	Progress resistance and duration gradually
 Functional Strength Training	Maintain lower extremity strength	Squatting, stair climbing, sit-to-stand patterns	Movement quality and symptom response	Sacrificing form for resistance	Increase challenge gradually
 Balance Progression	Improve stability and confidence	Single-leg and dynamic balance	Control and confidence	Advancing too quickly	Progress support surface and complexity
 Recreational Activity Progression	Support a gradual return to preferred recreational and fitness activities	Individualized activity participation	Pain, swelling, function	Returning to full participation too quickly	Gradual reintroduction of activity demands

RECOVERY DEPENDS ON

- ☒ Consistency
- ☒ Gradual progression
- ☒ Quality movement
- ☒ Load management
- ☒ Following your rehabilitation plan

LONG TERM SUCCESS & RECOVERY



Recovery is an ongoing process.

Consistency, movement, strength, and activity modification are important components of long-term success.



LONG-TERM SUCCESS

- Continue strengthening the muscles that support your knee
- Maintain knee mobility and flexibility
- Prioritize movement quality over speed
- Gradually return to your preferred activities
- Stay consistent with your exercise program



REMEMBER

- Progress is not always linear
- Small improvements add up
- Continue strengthening beyond six weeks
- Stay physically active
- Follow your care team's recommendations



CONTACT DR. ABOUALI'S OFFICE IF YOU EXPERIENCE



Severe pain or pain that continues to worsen



Significant swelling



Fever greater than 101°F

(A low-grade fever may be normal in the first 1-2 days)



Chills



Redness or warmth around the knee



Inability to bear weight comfortably

Seek immediate care if needed. Do not rely on email for urgent concerns.

WEBSITE

www.torontosportsdoc.com

CONTACT CLINIC

416-546-7373

YOUR REHABILITATION APP

Continue your recovery through the rehabilitation app with personalized exercise videos, progress tracking, and recovery guidance.



Your recovery is a process. Stay consistent, stay patient, and trust the plan.