

# Geoffrey S. Van Thiel, MD/MBA

www.VanThielMD.com gvanthiel@rockfordortho.com

# Hip Arthroscopy Labral Repair/Debridement with Femoroplasty

#### Initial Joint Protection Guidelines: 1-4 weeks post-op

Joint Protection Patient Education:

- Avoid active lifting or flexing and rotating the hip for 2-3 weeks
- Assistance to move the involved LE is required for all transfers for 1 week
- Do not sit with hip flexed to 90 deg for greater than 30 min for 2 weeks
- Lay on stomach for 2-3 hours/day to decrease hip tightness anteriorly (patients with low back pain may modify position)

#### Weight bearing restrictions:

- FFWB x 2 weeks if no MFx (Microfracture), x 6 weeks with MFx
- PT educate patient on FFWB with 20 lbs pressure

# Brace (if prescribed by Dr. Van Thiel) is used for 2 weeks:

- ROM set at 0 deg extension and 60 deg flexion for walking
- Wear brace for sleeping, no change in ROM

# Post Operative ROM restrictions: ROM are guidelines, painfree range only

- Flexion limited to 90 and Abd limited to 30 deg x 2 weeks
- In 90 deg. flexion supine: IR limited to 0 deg and ER to 30 deg x 3 weeks
- Prone IR to neutral. Prone ER limited to 20 deg x 3 weeks
- Prone hip extension to 0 deg x 3 weeks

# Post Operative Therapy guidelines:

- Patient seen 1-3x/week x 12-16 weeks
- Rehabilitation key to prevent stiffness and post-op scarring
- Form and control are key to prevent compensatory patterns and soft tissue irritation
- Patient may progress at different rates, please use clinical decision making to guide patient care
- Time frames may be modified depending on patient's preoperative fitness level

#### Phase I (1-5 days post op)

- · Wound care: Observe for signs of infection.
- Modalities: PRN for pain and inflammation (Cryotherapy, IFC)
- Patient education, WB and Brace: See above
- Manual therapy interventions: Beginning superficial day 1 for edema control and scar mobilization. Monitor adductors mm group for rapid development of mm tone.
- Joint mobilizations: none at this phase
- ROM: PROM Performed by therapist within protocol and patient tolerance week
  - o Bike is an excellent tool with a raised seat to decrease hip flexion
  - o PROM within above listed ROM limits including:
    - Circumduction: Hip flex 70/knee 90, move thigh in small CW/CCW circular motions.

- Avoid rotation of the hip into IR/ER.
- Neutral Circumduction: knee ext, abd patient leg to 20 deg, small circles CW/CCW.
- Supine hip flexion to max of 90 degrees until p/o 2 weeks. Avoid anterior hip pinching.
- No caudal glides until 3 weeks post-op
- Supine abduction: direct abd to max of 30 deg, neutral rotation
- Supine ER: Hip flex 70/knee 90, slowly ER to max of 30 deg
- Supine IR: Hip flex 70/knee 90, slowly IR to max of 20 degrees avoiding any pinching in the groin or back of hip
- Prone IR: knee flex 90, IR slowly as tolerated
- Prone ER: knee flex 90, gently stretch to max of 20 (avoiding ant hip pain)
- Prone ext: knee flex 90, slowly extend hip to 0 deg maximum
- Prone on elbows or press ups: slow extension of lumbar spine beginning by propping on elbows and progressing to press ups as tolerated
- ROM: none first week, gradually introduce in Phase II p/o week 2-3 painfree only avoiding tendonitis
- Strengthening: Isometrics beginning post op day 1-day 7
  - o Gluet sets, quad sets and TrA Isometrics supine or prone
  - Ankle AROM
  - o Upright stationary bike with high seat for AROM (no recumbent bike)

Phase II (5 days to 6 weeks)	Phase III (6 weeks to 12 weeks)	
Rehab Goals by completion of phase:	Rehab Goals by completion of phase:	
<ul> <li>Progress ROM to 75%</li> </ul>	<ul> <li>Symmetrical ROM</li> </ul>	
of uninvolved	<ul> <li>Strength hip flexion 70% and</li> </ul>	
<ul> <li>SLR Abd gluet med x 10 reps at</li> </ul>	all other hip motions 80% of	
4/5	uninvolved	
w/o compensation	<ul> <li>Normal gait without</li> </ul>	
<ul> <li>Progress to FWB without</li> </ul>	Trendelenburg	
assistive device	Sign	
<ul> <li>Proximal stability, proper mm</li> </ul>		
Precautions:	Precautions:	
<ul> <li>Avoid hip flexor tendonitis</li> </ul>	<ul> <li>Continue to avoid soft tissue</li> </ul>	
<ul> <li>Avoid anterior capsular pain and</li> </ul>	flare ups that delay progress	
pinching with ROM. Do no push	<ul> <li>Promote normal movement</li> </ul>	
through pain for strengthening	patterns to avoid	
or ROM.	compensation with higher	
	level activities	

# Phase II (5 days -6 weeks post op)

- Wound care: Continue Phase I
- Modalities: Continue Phase I
- Weight bearing: If no MFx may begin to progress WB within painfree levels
- Brace: Worn until s/p 6 weeks. MD may D/C earlier. May remove brace during therapy.
- Crutches: Begin to wean from crutches at 2 weeks. Avoid rapid DC of crutches to avoid tendonitis of the hip flexor musculature.

\_

- Manual therapy interventions: continue to progress soft tissue mobilization to prevent stiffness anterior hip
- Joint Mobilizations: at 3 weeks, may begin only if clear deficit is present. Do not want to decrease passive stability of the hip in not limited:
  - o Gentle oscillations grade 1-2 for pain
  - Caudal glide during flexion to decrease pinching during ROM
  - Posterior/inferior glides at week 4
  - o Do not stress anterior capsule for 6 weeks with joint mobilizations
- ROM: Continue with limited ROM as noted in guidelines until appropriate 2 or 3 weeks post op.
  - Gradually progress A/PROM after this time working towards goal of 75% of uninvolved LE by end of Phase II. Avoid anterior hip joint pinch or pain.
  - o PROM may be progressed to also include:
    - Kneeling on stool and active IR/ER initially within ROM limits
    - Quadruped rocking: Hands/knees position, pelvis level, slowly rock forwards/backwards from hands to knees. Once ROM restrictions lifted, patient may begin to rock back bringing seat to heels
    - Half kneeling pelvic tilts: Kneeling on involved leg, slowly perform posterior pelvic tilt to stretch the anterior hip
- Strengthening: Gradual progression of strengthening throughout phase within painfree motion:
  - Below are guidelines only, various strengthening activities may be included in phase II and III.

	Phase II(5 days to 6 weeks)	Phase III(6 weeks to 12 weeks)
Supine Progressions	<ul> <li>Hooklying hip IR/ER maintaining level pelvis</li> <li>Pelvic clock (12-6, 3-9 and diagonals)</li> <li>Supine lower trunk rotations</li> <li>TrA isometric with bent knee fall outs and isometrics with marching</li> <li>Supine FABER slides with TrA isometric-involved heel starts in FABERS position</li> </ul>	Supine progression of TrA stabilization with UE/LE ext
Bridging Progressions	<ul> <li>Double leg bridge, bridge with add isometric w/pillow or ball, bridge with abduction with Theraband or Pilates ring</li> </ul>	<ul> <li>bridge with single knee kicks and single bridge</li> </ul>
Sidelying Progresions	<ul> <li>Sidelying clams with neutral spine and pelvis. Reverse clams.</li> <li>Add Theraband for resistance or Pilates ring for isometric.</li> </ul>	<ul> <li>Half side plank taps- Hips 0 ext, knees flex</li> <li>Half side plank holds- same, hold 30 sec to 3 min</li> <li>Modified side plank holds- top leg ext</li> </ul>
Prone Progressions	<ul> <li>Prone alternate knee flexion with TA isom</li> <li>Prone hip midrange IR/ER with level pelvis</li> <li>Prone hip ext with knee ext/flex</li> <li>Prone alternate UE/LE extension</li> </ul>	Prone hip ext

\_

		T
Prone Plank Progressions	Modified prone plank- knees bent	<ul> <li>Full prone         plank- elbows         and feet</li> <li>Full /half plank on         BOSU or with</li> </ul>
Quadruped Progressions	<ul> <li>Quadruped anterior/posterior pelvic tilts</li> <li>Quadruped arm and leg raises with neutral pelvis/spine</li> </ul>	<ul> <li>Quadruped alternate arm and leg raises- add</li> </ul>
Half Kneeling Progressions	<ul> <li>Kneeling on involved:</li> <li>½ kneeling pelvic clocks</li> <li>½ kneeling weight shifts-neutral spine, shift forward for gentle stretch anterior hip within hip ext limit x week 3</li> </ul>	<ul> <li>½ kneeling upper shoulder girdle strengthening while maintaining neutral spine/hip positioning</li> <li>½ kneeling trunk rotations-clasp</li> </ul>
Gait Progressions	<ul> <li>Standing side to side weight shifting</li> <li>Standing anterior/posterior weight shifting- stagger stance</li> </ul>	<ul> <li>Retro walking</li> <li>Side stepping with or without band</li> <li>Retro walking with resistance</li> </ul>
Squat/Lunge Progressions	<ul> <li>Exercise ball wall sits with ball behind low back</li> <li>Partial squat with feet shoulder width apart and slight toe in position. Squat to 30 degrees at knees</li> <li>Forward, lateral and reverse lunges - lunge towards involved</li> <li>Split squat in limited range of motion</li> </ul>	<ul> <li>Double leg squats/wall slides- to 70 deg flex</li> <li>Double leg squat with weight shift</li> <li>Sidestep w/band</li> <li>Bulgarian split squats</li> <li>Single leg squats- 30 deg progress to 70</li> <li>Split squats or lunges with rotation of trunk- bilat UE</li> </ul>
Balance Progressions	Single leg balance with level pelvis	<ul> <li>Hip hiking- can add ball roll up wall with opp LE</li> <li>Single leg stand, isom abd opp LE press into wall</li> <li>flex to 20 deg</li> </ul>
Slide Board Progressions	• none	<ul> <li>Unilateral Lat slides</li> <li>Lateral lunges</li> <li>Lateral Slides</li> <li>Reverse lunges</li> </ul>
Cardiovascular Program	<ul> <li>Stationary Bike w/o resistance x 20 min.</li> <li>Increase duration by 5 min/week @ week 2</li> </ul>	<ul><li>Elliptical may begin s/p 6 weeks</li><li>No TM ambulation until 12 weeks</li></ul>

#### Phase IV: (12 weeks – 16 weeks)

- ROM: Symmetrical ROM.
- Strengthening:
  - Gradually progress strength challenges and agility activities painfree level only.
  - Normalize LE strength with all activities without compensation or Trendelenburg sign.
  - o Begin low level agility activities progressing towards higher level challenges.
- Plyometrics:
  - Prior to initiating plyometrics patient should be able to complete a single leg press 1.5x body weight.
- Treadmill:
  - May begin with walking on treadmill gradually progressing to running avoiding symptom flare or tendonitis. Guideline for return to running:
- Running:
  - Prior to returning to running patient should be able to complete the "10 Rep Triple" which includes:
    - 1. 10 single leg squats w/o kinetic collapse
    - 2. 10 front step downs w/o kinetic collapse
    - 3. 10 sidelying Abd SLR against resistance grade minimum of 4/5 all reps

-