DR. MATTHEW R. BYINGTON

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PRAIRIE ORTHOPAEDIC & PLASTIC SURGERY

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REHABILITATION GUIDELINES: TOTAL HIP REPLACEMENT (ANTERIOR-LATERAL APPROACH)

General Goals:

- 1. Short Term (Week 1)
 - A. Independent with exercises
 - B. Independent with ambulation with assistive devices as needed
 - a. Household distances
 - b. Even and uneven surfaces (stairs)
 - c. Weightbearing status determined by surgeon: generally WBAT walker for 3-6 weeks and then a cane for up to 3-6 months
 - 1) Exception: intra-operative fracture or severe osteoporosis
 - C. Independent with bed mobility and transfers
 - D. Independent with total hip precautions
- 2. Long Term (Week 6)-Cemented; (Week 12)-Non-cemented
 - A. Range of motion within functional limits to allow independence with activities of daily living (ADL's) (e.g. dressing, bathing, transfers with adaptive equipment as needed)
 - B. Sufficient strength to allow return to normal ADL's (e.g. driving, aerobic exercise, use of regular height commode)
 - C. Independent ambulation
 - a. With assistive device as indicated
 - b. Without gait deviation
 - c. Household and community distances (1000')
 - d. On even and uneven surfaces

General guidelines:

The program will be individualized to the needs of the patients, specific pathology and pre/post-op condition. Patients non-compliant with home exercises will be treated in-clinic three times per week. Rehabilitation will require ten to twenty visits. Anterior-Lateral approach necessitates need to **protect from hip abduction for the first 6 weeks** after surgery.

Non-cemented hips (usually on younger THA patients) are protected weight bearing with a **walker for 3-6 weeks and then a cane for up to 3-6 months**. Cane to be used in the contralateral hand. Wheelchairs can be used for long distances.

Therapeutic Phases

- I. <u>Preoperative</u>
 - A. Fit for walker and instruct in use
 - B. Instruct in postoperative exercise program
 - C. Instruct in total hip precautions
- II. Postoperative

A. Day 1-2 (Inpatient visit)

- 1. Transfer training (bed mobility, supine -> sit, sit -> stand)
- 2. Ambulation training with walker
- 3. Quad Sets
- 4. Glute Sets
- 5. Ankle Pumps
- 6. Supine hip abduction/adduction (avoid going past neutral)
- 7. Review total hip precautions

B. <u>Day 3-45</u>

- 1. Continue previous exercises
- 2. Continue gait training with weight bearing as tolerated with a walker
- 3. Lying Supine:
- Thigh squeeze
- Ankle pumps
- Seated long arc quads, short arc quads
- Knee extension
- Straight leg raise
- May also perform anterior capsule stretching of hip (to avoid hip

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flexion contracture) – similar to Thomas test position, flex the uninvolved hip to chest

- 4. Lying Prone:
- Knee bends
- Leg Lifts

C. 6 weeks +

- These are recommendations of safe exercises, patient does not have to perform every exercise listed.

- 1. Advance with previous exercises
- 2. Basic closed chain exercises (when full weight bearing on involved extremity)
 - a. Concentrate on abduction to decrease/prevent Trendelenberg gait
 - b. Total Gym Squats (0-45 knee flexion), toe raises
 - c. Standing mini-squats (0-45 knee flexion)
- 3. Bridging
- 4. Standing 3-way leg raises (Hip flex, abd, ext)
- 5. Standing knee flexion
- 6. Standing toe raises
- 7. Seated BAPS board
- 8. Hamstring Curl Machine (hip precautions)
- 9. Leg Extension Machine (hip precautions)
- 10. Stationary bicycle (seat high to maintain hip precautions)
- 11. Advance to treadmill
- D. Recommended long-term activities after Total Hip Replacement

Very Good, Highly	Good,	Needs skill, prior	With care, ask your	AVOID
Recommended	Recommended	expertise	doctor	
Stationary Cycling	Bowling	Bicycling (street)	Aerobic Exercise	Baseball
Ballroom dancing	Fencing	Canoeing	Calisthenics	Basketball
Square Dancing	Rowing	Horseback Riding	Jazz Dancing	Football
Golf	Speed Walking	Ice Skating	Downhill Skiing	Softball
Stationary (Nordic	Table Tennis	_	Doubles Tennis	Handball
Track) skiing	Cross-country skiing		Step Machines	Jogging
Swimming	Weightlifting		Nautilus Machines	Racquetball
Walking			Inline Skating	Lacrosse
-			Downhill Skiing	Soccer
				Singles Tennis
				Volleyball

HIP PRECAUTIONS

<u>Positional precautions</u>: no hip abduction past neutral, no hip internal rotation past neutral, and no hip flexion >90. Adhere to these principles for a minimum of 8 weeks until soft tissue stabilization has occurred; however, hip flexion may increase >90 at 6 weeks.

Abduction pillow: use the abduction pillow for the first 4 weeks while resting or sleeping in bed.

Bathroom: use the elevated toilet seat at all times. Can be discontinued at 3rd month.

<u>Assistive Devices:</u> Use ambulation devices (cane, walker, quad cane) as instructed by physical therapy. "Reacher" and "grabber" devices to be used for retrieving objects on floor or assist with socks or stockings. Long shoe horn to be used with loosely fitting shoes or loafers. A kit can be provided to patient (if stocked).

Transfers: Bed to chair: Avoid leaning forward to get out of chair to bed. Slide hips forward first, then come to standing. Use someone to assist patient until patient demonstrates safe, secure transfers. Bathroom: Use elevated toilet seat with assistance.

Continue assistance until safe, secure transfers. NOTE: Throw rugs should be moved out of bathrooms, kitchens when using assistive devices to ambulate.

In Vehicle: Can travel in the back seat of a 4-door sedan, sitting or reclining lengthwise across the seat, leaning on 1 or 2 pillows under head and back. If no 4-door sedan, then recline in front seat, but sit on 1 or 2 pillows.

Driving: Usually at 6 weeks post-operatively.