Physical Therapy Amputee Training Program

*If access to med bridge you can find pictures and descriptions for many of the below interventions
Template Names: BKA beginner, AKA beginner, Beginner Functional AKA/BKA, Intermediate Functional AKA/BKA, Intermediate and Advanced AKA/BKA, Advanced Functional AKA/BKA

WEEK 1-3 POST HOSPITAL DC

1. Flexibility/Stretching – 10 min TID
- a. AK/BK – Hip flexor stretch
- b. BK - Hamstring stretch

2. Strengthening – BID
- a. BUE w/c pushups
- b. Residual and Sound limb – AROM (beginner)
  - supine hip flex
  - prone hip ext
  - hip adduction
  - BK knee flex
  - knee ext
  - S/L hip abd
  - hip add
- c. Residual and Sound limb – AROM (intermediate)
  - prone with towel roll under end of leg/knee elevate hip
  - supine with towel roll under end of leg/knee elevate hip
  - S/L with residual limb on padded stool elevate hip same side + elevate leg opposite side
- d. Residual and sound limb – AROM theraband (advance)
  - supine hip flex
  - hip ext
  - hip abd
  - hip add
  - BK prone knee flex
  - knee ext

3. Transfers – Sliding board or standing pivot

4. Pelvic stability – Standing with walker – Weight shifting
- Forward
- Backward
- Right
- Left
- Circles

5. Standing with walker – Static stand pelvis held level and centered (Goal: 1-5 minutes)

6. Skin checks – 2 times per day

Physical Therapy Amputee Training Program

WEEK 3-6 POST OP

1. Flexibility/Stretching – Same as week 1-3

2. Strengthening – Same as week 1-3

3. Standing with walker – Single leg pushups

4. Pelvic stability –

i. Standing with walker – Weight shifting all direction

ii. Seated Lateral flexion Right and Left – Hand held weights

iii. Seated PNF D1 & D2 flexion – Weighted ball single or bilateral hands, theraband

iv. Seated trunk rotation – Weighted ball bilateral hands

a. Mat table progress to foam, BOSU

v. Planks

5. Standing with walker – Static stand pelvis held level and centered

6. Gait – Begin measured distance daily walking program week three.

Progress at rate of 2x initial distance (as measured at week 1) by week four

3x initial distance by week five

4 x initial distance by week six

7. Shrinker on at all times except when bathing/showering

8. Desensitization – see reference handout

9. Skin checks – 2 times per day

WEEK 6-10 POST OP

1. PT OP CLINIC – Initial visit (frequency of 1 time per week)

a. AMPPNOPro (Amputee Mobility Predictor- no prosthetic), LCI (Locomotor Capability Index), ABC (Activities Specific Balance Confidence Scale)

b. Flexibility/stretching – PROM with end range passive stretch

AK hip flexors

hip adductors

hip rotators

BK hip flexors

hip adductors

hip rotators

knee flexors

knee extensors

e. Strengthening –

i. Continue with all previous mat strengthening exercises and progress to include Manual Resistance

-caregiver education on application of resistance

f. Gym equipment – HUR UE/LE, Cybex seated BUE, Rickshaw, Free weights, Sci-Fit, Biostep , arm ergometer

g. Pelvic stability/Core strengthening –

i. Continue with previous core strengthening exercises

ii. Parallel bars weight shifting level surface

iii. resisted weight shifting manually or with theraband, weight shifting standing

a. Progress to uneven surfaces

h. Gait – Measured distance walking –

i. Progression: Parallel bars to walker/Lofstrands/axillary crutch (AC) Anti-Gravity TM, TM

ii. Progress at distance of 5x initial distance 7th week

6x initial distance 8th week,

7x initial distance 9th week

8x initial distance 10th week

i. Shrinker on at all times except when bathing/showering

j. Skin checks 2 times a day

k. desensitization techniques

WEEK 10- 14 POST OP

1. **Pt in temporary socket 1 hour progressing to 2-3 hours, shrinker on when not in socket**
2. **Skin check 2 times per day**
3. **PT OP CLINIC –** 2X/WK frequency in the clinic

a. ABC (Activities-Specific Balance Confidence Scale), LCI (Locomotor Capability Index), AMPPro (Amputee Mobility Predictor – with prosthetic)

b. Prosthetic training – Donning and doffing, progressive wearing schedule, skin checks

c. Strengthening – same strengthening as previous week with progressions as tolerated

d. Gym equipment – HUR UE/LE, Cybex seated/standing, Rickshaw, Free weights, Sci-Fit, Elliptical, Biostep, arm ergometer with progressions as tolerated

e. Balance/Pelvic stability/Socket Control –

i. Parallel bars weight shifting and resisted weight shifting manually or with theraband, weight shifting standing on foam

ii. Parallel bars stand varied feet positions, stand on rocker board, stand on foam

iii. Parallel bars stand half stance 2”/4”/6” block, stand on therapads,

iv. Stand one foot on tennis ball, arm movements, ball toss

v. All parallel bar activities performed outside of parallel bars

vi. Neurocom – Weight shifting cabinet, weight shifting long forceplate

vii. Rebounder – Standing level surface, rocker board, foam

viii. Wii balance board

ix. Trampoline – Bilateral and single leg

x. Cybex resisted walking

f. Prosthetic gait training – Parallel bars at two hand assist level, one hand assist level
    i. Parallel bars with walker, Hemi-walker, WBQC
    ii. Outside of parallel bars with walker, hemi-walker, WBQC, NBQC, SPC, Anti-Gravity TM, TM

WEEK 14-18+ POST OP

1. **PT is wearing temporary/definitive socket during the day, continue to wear shrinker at night**
2. **PT OP CLINIC 2X/WK**
    a. Retest: ABC, LCI, AMPPro
    b. Balance/Pelvic stability/Socket Control – continue from previous section with definitive socket
    c. Prosthetic gait training – Indoor level surface with walker, hemi-walker, WBQC, NBQC, SPC, Anti-Gravity TM, TM
        i. Indoor uneven surfaces, curb, ramp, stairs with railing, stairs without railing
        ii. Outdoor level surfaces, sidewalks, parking lot
        iii. Outdoor uneven surfaces, grass, inclines, curb, ramp, stairs with Railing, stairs without railing
        iv. Job specific
        v. Recreation specific
        vi. Sport specific