

Euro-Pēds®



National Center for Intensive Pediatric PT

## HOME EXERCISE PROGRAM

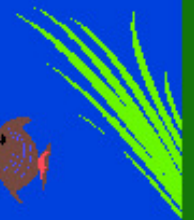
Samantha



Prepared by:

Holly Timmreck, PT, DPT

July 2009



# SAMPLE

## Stretching

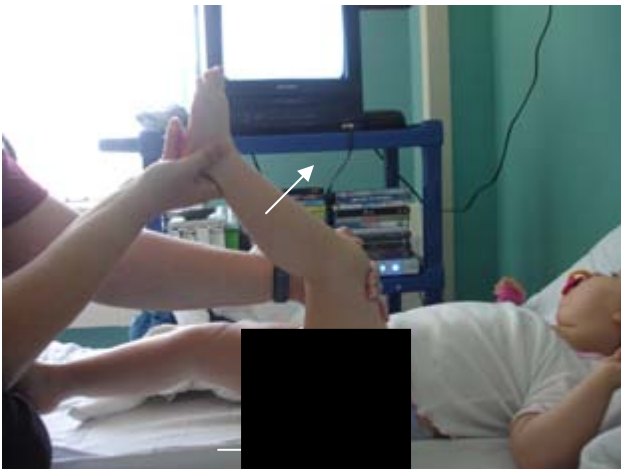
ALL STRETCHES SHOULD BE HELD FOR AT LEAST 30 SECONDS  
AND DONE 3 TIMES



- **HEEL CORD STRETCH**
- This stretch is for Sam's heel cords.
- Place the palm of your hand on Sam's foot with your fingers around her heel.
- The other hand gently keeps the knee straight.
- Pull out with your fingers while pushing up toward Sam's knee with your hand on her foot.



- **TOE STRETCH**
- This stretch is for Sam's toes.
- Place your thumbs under her toes while your fingers are on the top of her foot.
- You are stretching her toes up toward her knee as she tends to curl them down toward the floor.



- **HAMSTRING STRETCH**
- This stretches the hamstring muscle behind Sam's knee.
- Raise Sam's leg so that her hip is perpendicular to the floor.
- Place one hand above her knee and the other at her heel/ankle.
- While stabilizing with the hand at the knee, gently raise her ankle toward the ceiling—attempting to make her leg straight.

# SAMPLE

## Stretching continued...

**ALL STRETCHES SHOULD BE HELD FOR AT LEAST 30 SECONDS  
AND DONE 3 TIMES**



- **HIP STRETCH: INTERNAL ROTATORS**
- This stretches the muscles on the inside of Sam's hip.
- Place one hand just above Sam's knee and the other around her ankle.
- Sam's hip should be perpendicular to the floor.
- While stabilizing with one hand, gently rotate Sam's hip so that her foot is going toward her other hip.



- **HIP STRETCH: LONG ADDUCTORS**
- This stretches the muscles on the inside of Sam's legs.
- Place one hand on the inside of Sam's leg to stabilize. The other hand around her ankle.
- Gently pull Sam's leg outward away from her body—**most of the pressure should be just above Sam's knee.**
- It may be helpful to stabilize Sam's other leg with your leg as she will tend to try to keep her legs together.



- **HIP STRETCH: SHORT ADDUCTORS**
- This will stretch muscles on the inside of Sam's legs.
- Bend Sam's leg so the bottom of her foot touches the inside of her other knee—stabilize her foot there with one hand.
- With the other hand, gently push down on Sam's bent knee—pushing down toward the floor.

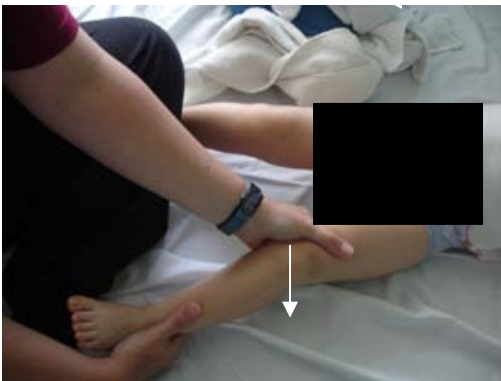
**SAMPLE**

## Strengthening

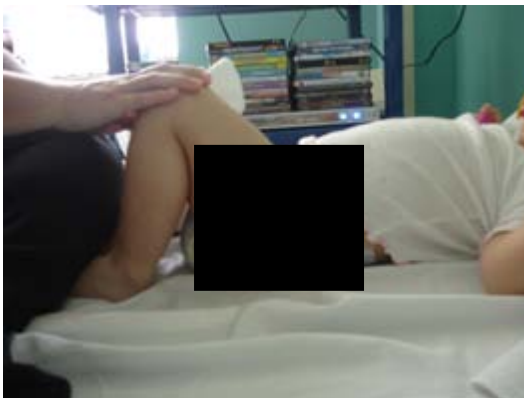
**STRENGTHENING EXERCISES CAN BE DONE 10 TIMES;**  
**TRY TO INCREASE TO 15 THEN TO 20 AS TOLERATED**



- **KICKING:** TO STRENGTHEN BOTTOM AND LEG MUSCLES
- Bend Sam's leg up toward her tummy with her hip and knee both bent.
- Then tell Sam to "kick" or "push" (HI-YAH!)
- You can also stimulate her muscles by tapping/brushing the top of her thigh.



- **KICKING OUT TO THE SIDE:** TO STRENGTHEN OUTSIDE OF HIP
- Stabilize at Sam's knee with one hand and place other hand at her ankle.
- Gently help Sam kick out to the side—allowing her to relax the inside of her leg first.
- As with the stretch, stabilize Sam's other leg with your leg in order to keep them apart.



- **BRIDGING:** TO STRENGTHEN BOTTOM MUSCLES
- Bend Sam's hips and knee and stabilize feet under your legs.
- Tell Sam to lift her bottom up as you help by placing your fingers under her bottom with the palms of your hands on the sides of her legs.

## Stretching continued...



- **HIP FLEXOR STRETCH:** STRETCHES THE FRONT OF SAM'S HIPS
- Have Sam lie on her tummy and gently apply pressure to the back of her hips.
- Above is the progression of the stretch as each picture is a more aggressive stretch
- As Sam tolerates you can stabilize her hips with 1 hand and then lift her leg upward with your hand placed just above her knee.
- Her leg can be straight (pic #2) or bent (pic #3) for a more aggressive stretch
- The fourth picture shows how you can use your leg to assist

**SAMPLE**

## Play Activities

Complete during play with Sam; no standard rule for amount of play!



- **ROLLING**

- Sam needs the most assistance with the placement of her arms
- To roll from her back to her tummy start by lifting her arm up straight over her head
- Then you can assist under her shoulders if necessary to bring her up to her tummy
- To roll from her tummy to her back tuck the leading arm under her to begin the roll; she can usually move on her own after that



- **SIT TO STAND:**  
STRENGTHENS SAM'S LEGS

- You can have Sam straddle your leg or use a small bolster
- Tell Sam to "stand up"
- You can help her by supporting her at her hips/trunk as she needs it; she is able to push independently with her legs

- **TALL KNEELING:**  
STRENGTHENS SAM'S BOTTOM AND TRUNK MUSCLES

- You can use your legs in front and back of Sam to assist; possibly one hand on her chest to help with her trunk position
- Small 1 lb. weights were helpful in keeping Sam's hands on the tilted bench



## Play Activities continued...



- **BALL PLAY**
- You can have Sam sit on the ball for trunk strengthening/posture
- Or she can sit and use her arms to support herself to either side
- You can also have her do sit ups: have her lie back and then push up with her arms; you will have to help her by holding her at her hips and rotating to either side to get her started
- She may need support through her trunk and her hip (pic#4)



- **FLOOR SITTING WITH LEGS CROSSED (TAILOR SIT)**
- Sam can sit on the floor with her legs crossed to play or read
- You can support her through her hips/trunk as needed but have her do most of the work—the lower your hands, the more work she is doing through her trunk to support herself
- Notice that her hands are in her lap, she can also have them on the floor for support

## Example Schedule

### Monday

- Stretches in the morning or at bed time after bath when she is relaxed
- Kicks and Bridges
- Rolling, Sit to Stand, Tall Kneeling

### Tuesday

- Stretches (as above)
- Kicks and Bridges
- Ball Play and Floor Sitting

### Wednesday

- Stretches
- Kicks and Bridges
- Rolling, Sit to Stand, Tall Kneeling

### Thursday

- Stretches
- Kicks and Bridges
- Ball Play and Floor Sitting

### Friday

- Stretches
- Kicks and Bridges
- Rolling, Sit to Stand, Tall Kneeling

**Saturday: Take a day off!!**

**Sunday: Free Play!!**

**SAMPLE**