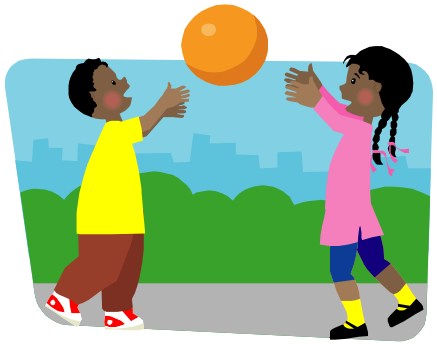
Clerkship

Dominican Republic Group

Pediatric Exercise Flashcards



Created by Physical Therapy Students
at the University of Minnesota

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PHYSICAL THERAPY
UNIVERSITY OF MINNESOTA

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Stretching

Supine Leg Stretch

Target Muscle:	Hamstring
Position:	Lying on back with legs straight on wall
Watch for:	Keep legs parallel Toes toward nose Bottom up against wall
Hold for:	30 seconds to 1 minute 3 times 2-3 times per day

Supine Hip Stretch

Target Muscles:	Hip Flexors
Position:	Lying on back with legs off table
Watch for:	Do not arch back Do not twist at hips Keep legs parallel
Hold for:	30 seconds to 1 minute 3 times 2-3 times per day

Standing Leg Stretch

With knee bent

Target Muscles: Calf

Position:
1) Stand forward leaning arms on wall
2) Repeat with back knee straight and bent

Watch for:
Keep hips straight and foot in line with hips
Keep heel on ground
Point toes forward

Hold for:
30 seconds to 1 minute
3 times with knee bent
3 times with knee straight
2-3 times a day

With knee straight

Neck Stretch 1

Target Muscle:	Sternocleidomastoid
Position:	1.) Sitting, child faces forward and look over right shoulder 2.) Healthcare provider stabilizes with one hand on left shoulder 3.) Apply gentle pressure with other hand on left side of head
Watch for:	Do not allow left shoulder to raise
Hold for:	30 seconds to 1 minute 3 times 2-3 times per day

Neck Stretch 2

Target Muscles: Scalenes

Position:
1.) Sitting, child's left ear to their left shoulder
2.) Healthcare provider stabilizes with one hand on right shoulder
3.) Apply pressure with other hand on the right side of patient's head towards left shoulder.

Watch for:
Do not let shoulder raise
Avoid chin tuck or allowing face to ceiling

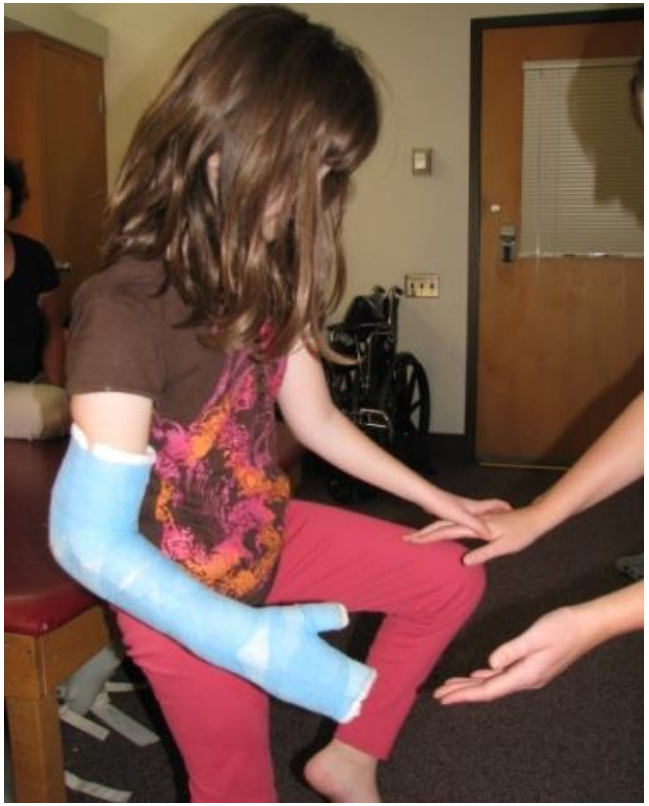
Hold for:
30 seconds to 1 minute
3 times
2-3 times per day

Play and Strengthening

Tug of War

Supplies needed:	A towel
Targeting:	Stability and strength
Position:	Patient and healthcare provider grab opposite ends of towel, both pulling towel away from the other as hard as they can
Watch for:	Make sure to maintain your balance

Marching



Target Muscles: Hip flexors

Position: Standing, bring one knee to chest, then lower
Repeat with opposite leg

Watch for: Make sure feet come off the ground

Exercise for: 1 minute and progress when capable

Bridging

Targets: Gluteus Medius/Maximus, Abdominals

Position: Lie on Back, bring bottom off floor and belly button to ceiling. Make a straight line from knees to chest

Watch For: curving only the back, stop if shoulder or knee pain

Bridge for: Repeat 15 times, 2 times in a row, once a day

Wrestling

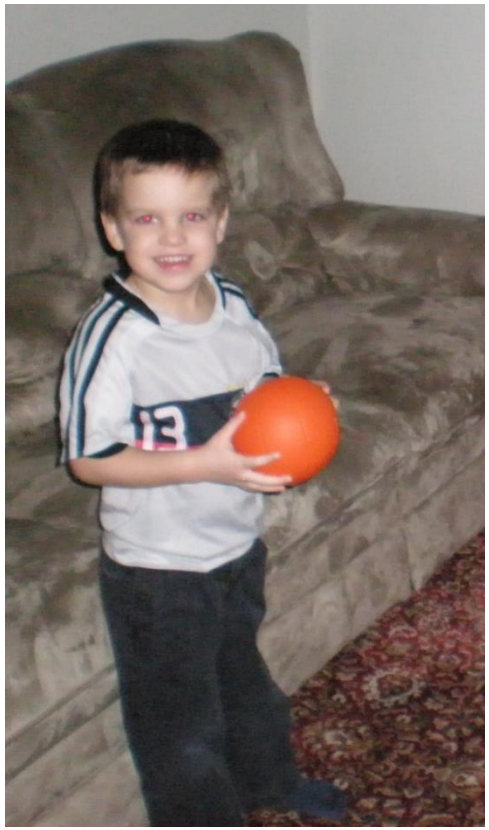
Need: Large soft open space

Targeting: All muscles
Endurance

Position: Have 2 children playfully wrestle using arms and legs.

Watch for: Monitor safety of children while wrestling.

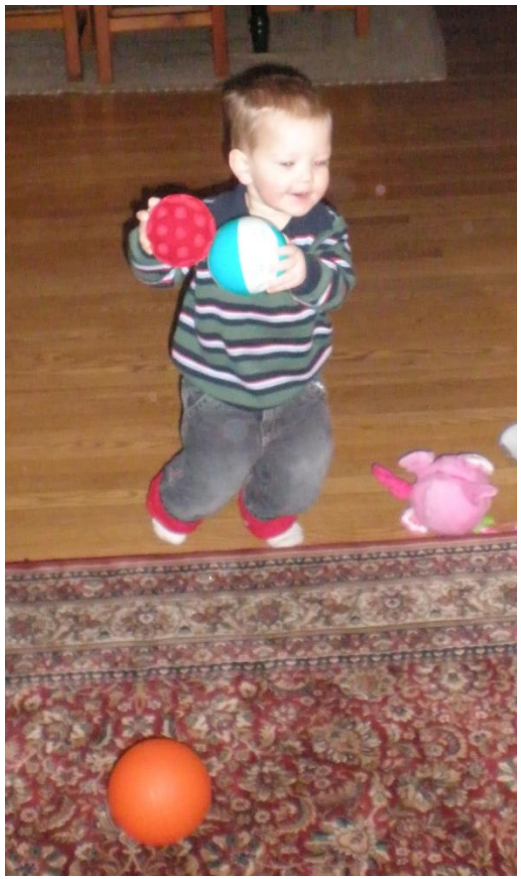
Ball Throwing



Need: Ball

Targeting: Shoulders
Abdominals
Paraspinals

Position: Give child ball and encourage them to throw the ball. Have child walk/run to retrieve ball if possible.



Kicking a Ball

Need:	Ball
Targeting:	Coordination
Position:	Place ball in front of child. Encourage child to kick with one foot. Encourage child to alternate feet. Progress to child walking or running to kick ball
Watch for:	Tripping over ball or stubbing toes

Carrying Water Jugs

Need: Water jugs filled with water (variable amounts based on strength of the child)

Targeting: Shoulders
Arms
Wrists

Position: Have child grab jugs under arms (left) or grasp handle if able (right). Have the child carry the jug for desired distance

Play – Reaching

Need: Block or ball

Targeting: Shoulder musculature
Abdominals
Paraspinals

Position: Place child in sitting. Physical Therapist holds object out of reach of child. Have child lean and reach to grasp object.

Watch for: Falling to the side or forward

Play – Crawling and Reaching

Need: Ball, block or paper (small object to reach for)

Targeting: Shoulder musculature
Paraspinals

Position: Place object in front and out of reach of child.
Have child crawl forward and reach to grasp object.

Watch for: Dragging

Play – Crawling

Target Muscles: Stabilizing shoulder musculature, hip flexors and extensors, abdominals, back extensors

Position: Place child on hands and knees. Encourage them to crawl in all directions.

Watch for: symmetry

Exercise for: As long as tolerated, as many times a day as possible to increase endurance.

Transitional Movements

Sitting → Lying on Back




Position: Child sitting. PT cradles by placing arms under knees and against the child's back in order to pivot the child so her body is over the surface. Have the child straighten their legs if able, if not assist them in getting comfortable

Watch for: Edge of Bed,

Repeat: 5 times, twice a day

Sitting → Standing

Position: Sitting, scoot child to edge of surface. Physical Therapist blocks child's knees with their leg. Have child stand with needed assistance.



Sit to Stand→Stay Standing

Position: same as above, once standing Physical Therapist holds arms or trunk to keep child stable.

Watch for: keep head upright, avoid rounded back and shoulders
Hold: 1 minute 3-5 times a day

Chair → Bed

Position: Child sits in the chair. Physical therapist scoots the child forward after placing their hand on their butt and under their knees. Physical Therapist should bend and lift from the knees to avoid injuring their back. Have the child place their chin on your shoulder for comfort. Physical therapist then lifts with their legs and pivot the child to the other surface, by pivoting on the left leg. After placing the child on the surface scoot the child's bottom back until the underside of their knees are on the edge of the surface.

Rolling

Target Muscles: Abdominals

Position: Place child supine and encourage rolling to side, leading with arm.

Watch for: Safety on various surfaces

Exercise for: As many times a day as possible

Kneeling

Target Muscles: Abdominals
Back extensors
Gluteus muscles

Position: Place child on their knees. Child can use table/stool to stabilize. Have child lift bottom off feet if possible.

Watch for: Leaning forearms on supportive surface

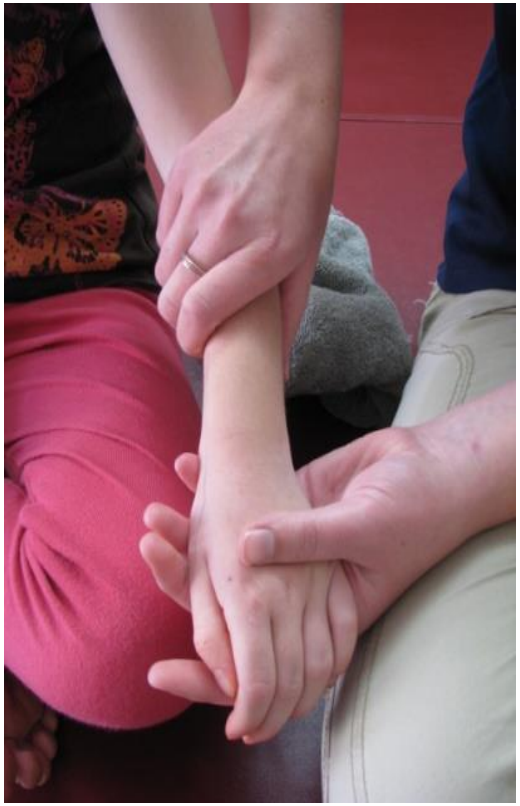
Exercise for: As long as tolerated, as many times a day as possible to increase endurance.

Standing Alone

Target Muscles:	Quadriceps Back extensors Abdominals Plantarflexors
Position:	Have child use table/stool to stabilize themselves in standing position. Let child bounce or sway.
Watch for:	Body or forearm leaning
Exercise for:	As long as tolerated, as many times a day as possible to increase endurance.

Sensory Integration

Continuous/Deep Pressure

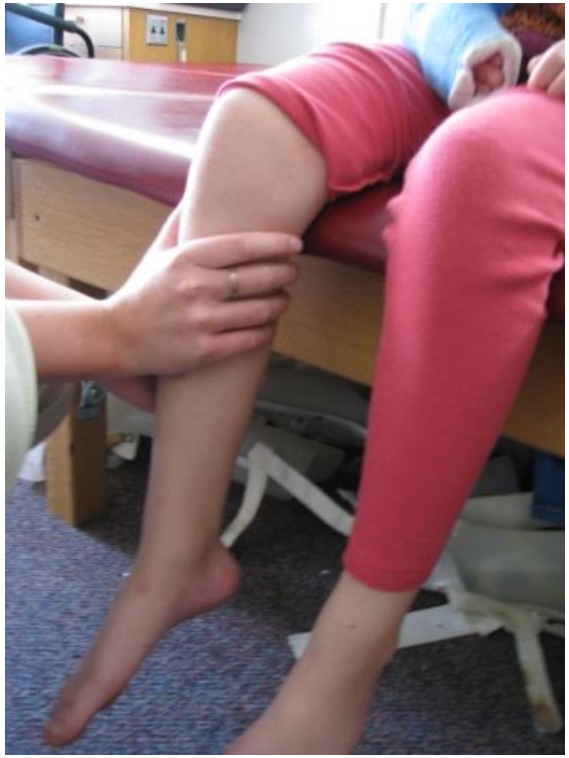


On Arm

Position: child is sitting. Physical Therapist holds child's knees with moderate pressure

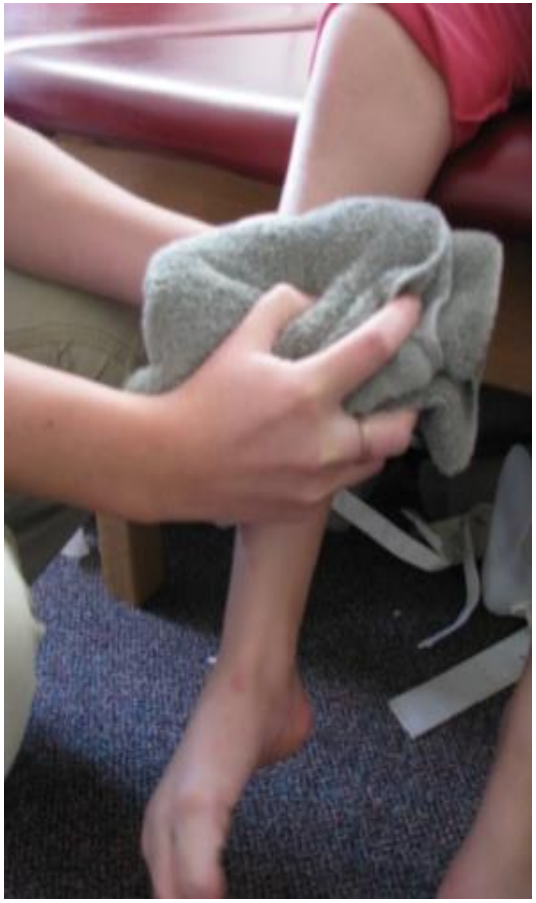
Watch for: Make sure there is enough pressure, avoid light touch

Hold: 30 seconds-1 minute (ask Bernadette)



On leg

Towel Rubbing

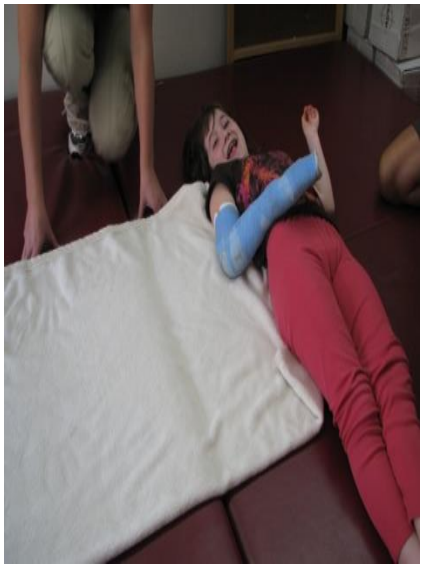
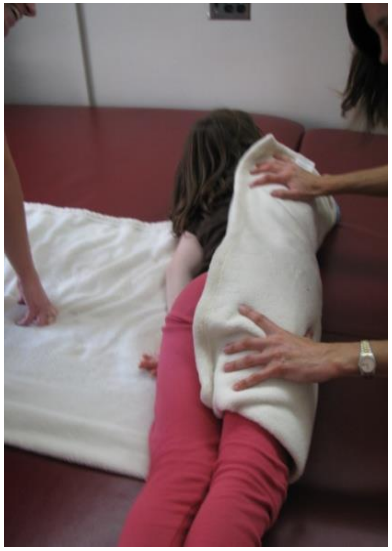


Position: Child Sitting. Physical Therapist hold arm or leg and with other arm rub towel against skin the length of the arm or leg in slow even strokes

Watch for: Child's reaction – anxiety and lack of tolerance

Repeat: 30 seconds, 5 times a day

Roll Child in Blanket

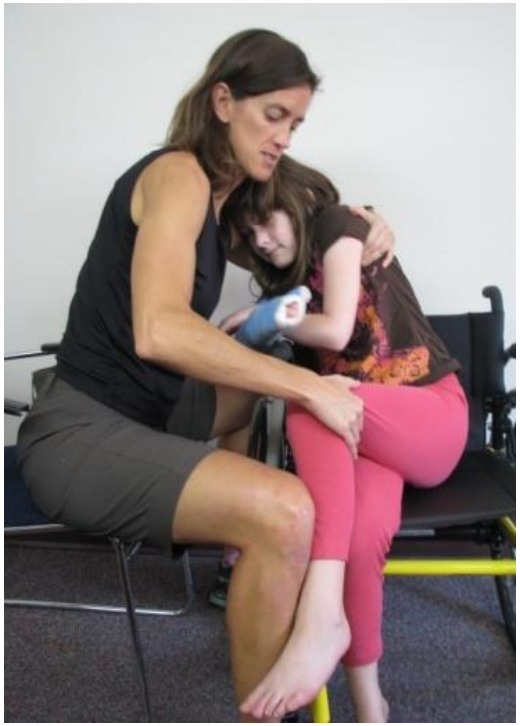
Need: large blanket

Position: Blanket will be placed on floor, child lie on the side of blanket with legs straight and arms at side. Physical therapist rolls child in blanket.

Sensory Integration

Need:	Bowl of unpopped popcorn, rice, small pebbles or beans
Position:	Have child submerge hand into bowl to experience different sensations. May place small objects inside bowl and have child pick them out.
Repeat:	5 times a day

Positioning



Sitting

Targets: Pressure Relief

Watch For: avoid Unstable chair

Hold for: 15 seconds, every 15 minutes

Position 1: Physical therapist will help child by placing child's head on shoulder, place arm around upper back and under the child's knee. Lean the child towards you causing the child's left part of bottom to come off chair. Repeat on right side

Position 2: Child will be sitting in a chair with arm rests,
Place on Right hand on arm rest and lean toward
left shoulder in order to lift Right side of bottom off seat. Repeat with left hand.

Supported Standing

Target Muscles:	Quadriceps Plantarflexors
Position:	Standing supported by caregiver underneath arms
Watch for:	Head support
Exercise for:	As long as tolerated, as many times a day as possible to increase endurance.

Supported Sitting

Target Muscles:	Paraspinals Abdominals
Position:	Sitting with legs in front of child, provide support to trunk of child as needed for balance
Watch for:	Head support
Exercise for:	As long as tolerated, as many times a day as possible to increase endurance.

Optimal Sleeping Positioning

Position: Side or back

Watch for: Remove excess blankets and toys from crib. Blankets used are to be securely wrapped around baby to prevent blockage of the airway

Exercise: Keep the airway open while sleeping

Tummy Time

Target Muscles: Neck Extensors
Paraspinals
Shoulder musculature

Position: Place child prone on elbows. Encourage child to keep head up.

Watch for: Head bobbing down

Exercise for: As long as tolerated, as many times a day as possible.