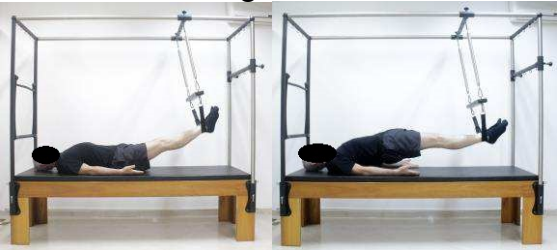
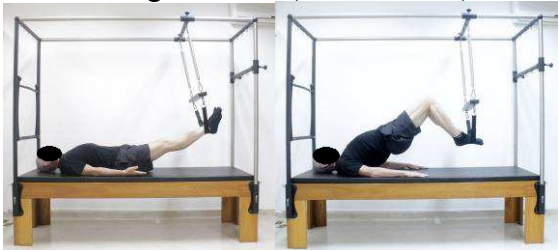
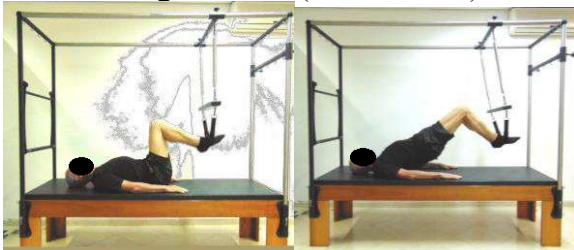
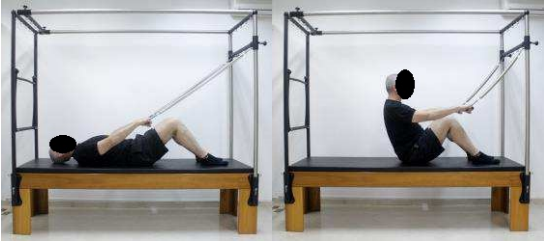







**APPENDIX 1-** Equipment-based exercises

<b>Spine Exercises</b>		
<b>Basic</b>	<b>Intermediate</b>	<b>Advanced</b>
<p><b>Bridge Variant</b></p>  <p>Objective: mobilize pelvis and spine and strengthen hamstrings and gluteus muscles.</p>	<p><b>Bridge Variant (flexed knees)</b></p>  <p>Objective: mobilize pelvis and spine and strengthen hamstrings and gluteus muscles.</p>	<p><b>Bridge Variant (flexed knees)</b></p>  <p>Objective: strengthen hamstrings, quadriceps femoris, triceps surae and gluteus muscles.</p>
<p><b>Rolling Back Down/Up (heavy spring and flexed knees)</b></p>  <p>Objective: mobilize the spine and strengthen the rectus abdominis and external oblique muscles.</p>	<p><b>Rolling Back Down/Up (heavy spring and extended knees)</b></p>  <p>Objective: mobilize the spine and strengthen the rectus abdominis and external oblique muscles.</p>	<p><b>Rolling Back Down/Up (mild spring and extended knees)</b></p>  <p>Objective: mobilize the spine and strengthen the rectus abdominis and external oblique muscles.</p>
<p><b>Hamstring Stretch Variant (both feet on the ground)</b></p>  <p>Objective: mobilize the spine and stretch posterior chain muscles.</p>	<p><b>Hamstring Stretch Variant (one foot in front of another)</b></p>  <p>Objective: mobilize the spine and stretch posterior chain muscles.</p>	<p><b>Hamstring Stretch Variant (one foot on the Cadillac)</b></p>  <p>Objective: mobilize the spine and stretch posterior chain muscles.</p>

Hamstring Stretch Variant (both legs on the ball)



Objective: mobilize the spine and stretch posterior chain muscles.

Hamstring Stretch Variant (one leg on the ball and the other in the air)



Objective: mobilize the spine and stretch posterior chain muscles.

Spine Stretch



Objective: mobilize the spine and stretch posterior chain muscles.

Knee Stretches Round (heavy spring)



Objective: mobilize and provide coordination for the movements of the spine.

Knee Stretches Round (mild spring)



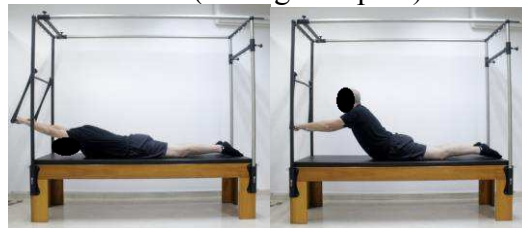
Objective: mobilize and provide coordination for the movements of the spine.

Knee Stretches Round (without spring)



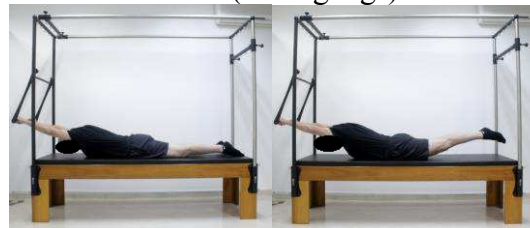
Objective: mobilize and provide coordination for the movements of the spine.

Swan (raising the spine)



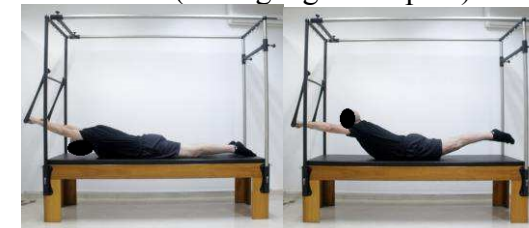
Objective: mobilize the spine, control the scapular elevation movement and strengthen the posterior chain muscles.

Swan (raising legs)



Objective: mobilize the spine, control the scapular elevation movement and strengthen the posterior chain muscles.

Swan (raising legs and spine)



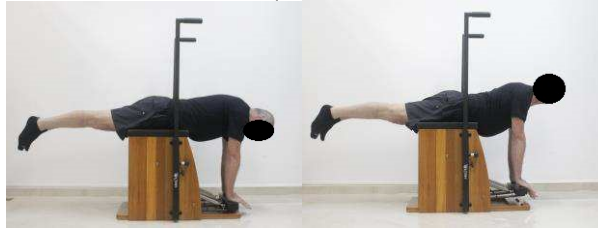
Objective: mobilize the spine, control the scapular elevation movement and strengthen the posterior chain muscles.

Swan Front (spine extension)



Objective: stretch anterior chain muscles and strengthen paravertebral muscles.

Swan Front (rotating the head)



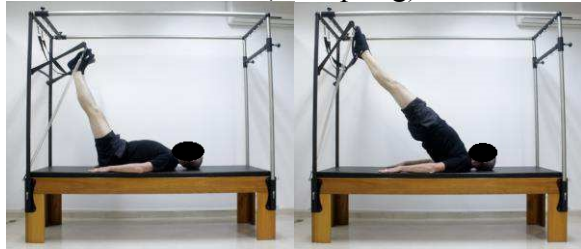
Objective: stretch anterior chain muscles and strengthen paravertebral muscles.

Swan Front (unilateral with spine extension)



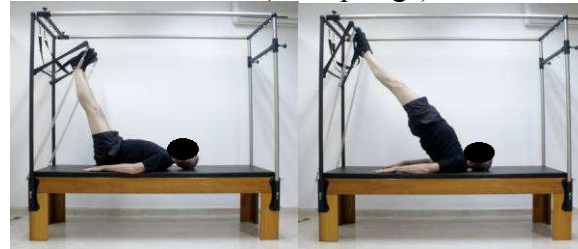
Objective: stretch anterior chain muscles and strengthen paravertebral muscles.

Tower (one spring)



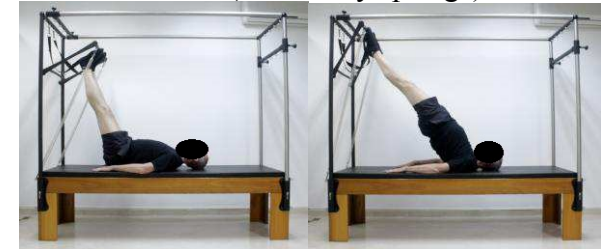
Objective: mobilize the spine, stretch posterior chain muscles and strengthen the abdominal, gluteus, hamstrings and triceps surae muscles.

Tower (two springs)



Objective: mobilize the spine, stretch posterior chain muscles and strengthen the abdominal, gluteus, hamstrings and triceps surae muscles

Tower (two heavy springs)



Objective: mobilize the spine, stretch posterior chain muscles and strengthen the abdominal, gluteus, hamstrings and triceps surae muscles.

Mermaid



Objective: stretch lateral chain muscles and control scapular elevation movement.

Mermaid



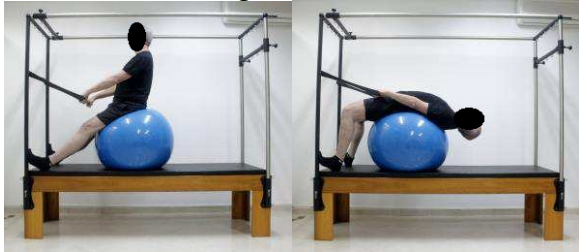
Objective: stretch lateral chain muscles and control scapular elevation movement.

Side Arm Sit Variant



Objective: stretch lateral chain muscles and control scapular elevation movement.

Rolling Back Variant



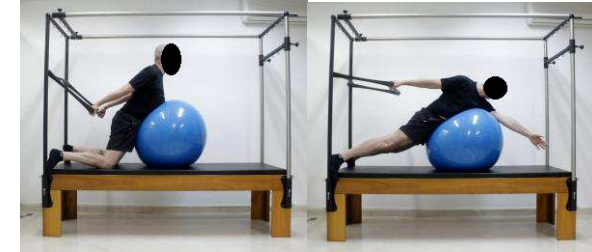
Objective: mobilize the spine and control abdominal muscles contraction associated with power house.

Rolling Back



Objective: mobilize the spine, stretch antero-internal chain of shoulder muscles and control abdominal muscles contraction associated with power house.

Swan Variant

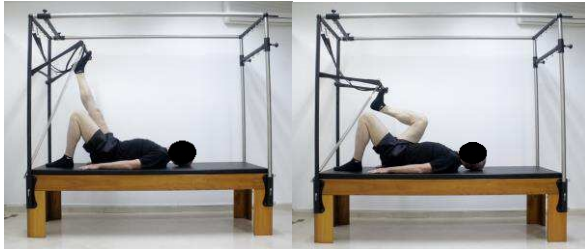


Objective: mobilize the spine, control scapular elevation movement, and stretch antero-internal chain shoulder muscles.

**Lower Limbs Exercises**

**Basic**

Tower



Objective: mobilize the spine, stretch posterior chain muscles and strengthen quadriceps femoris, hamstrings and gluteus maximus muscles.

**Intermediate**

Tower



Objective: mobilize the spine, stretch posterior chain muscles and strengthen quadriceps femoris, hamstrings and gluteus maximus muscles.

**Advanced**

Tower (heavy spring)



Objective: mobilize the spine, stretch posterior chain muscles and strengthen quadriceps femoris, hamstrings and gluteus maximus muscles.

**Running**



Objective: stretch posterior chain muscles and strengthen quadriceps femoris, gluteus maximus and triceps surae muscles.

**Tower**



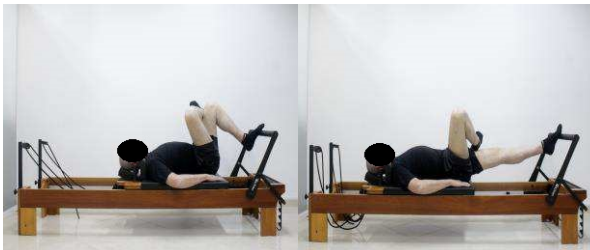
Objective: stretch posterior chain muscles and strengthen quadriceps femoris, gluteus maximus and triceps surae muscles.

**Stomach Massage Series**



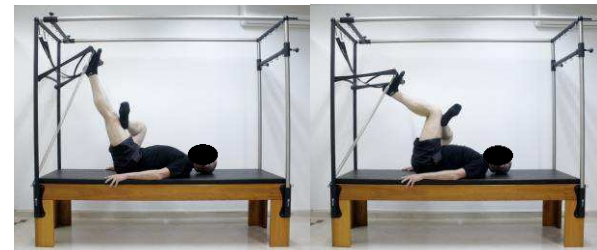
Objective: mobilize the spine, stretch posterior chain muscles and strengthen the quadriceps femoris and triceps surae muscle.

**Footwork**



Objective: stretch gluteus maximus and piriformis muscles and strengthen the quadriceps femoris muscle.

**Tower**



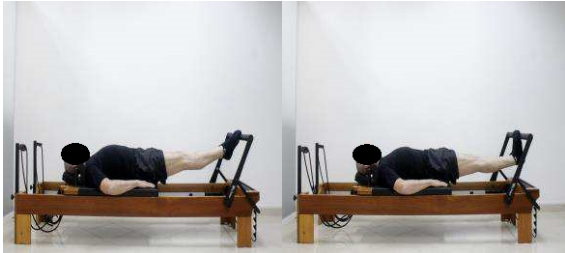
Objective: stretch gluteus maximus and piriformis muscles and strengthen the quadriceps femoris muscle.

**Tower (heavy spring)**



Objective: stretch gluteus maximus and piriformis muscles and strengthen the quadriceps femoris muscle.

Footwork



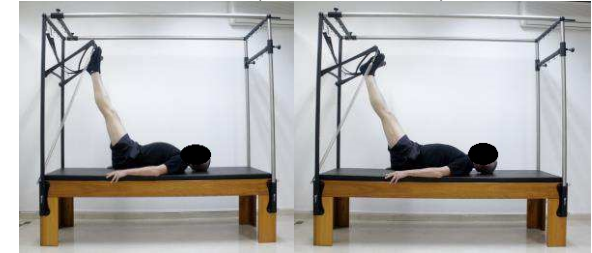
Objective: stretch hamstrings and gastrocnemius muscles and strengthen gastrocnemius muscles.

Achilles Stretch



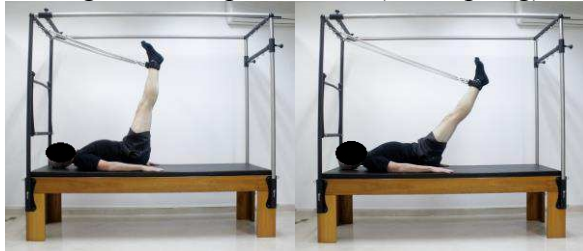
Objective: stretch and strengthen gastrocnemius muscles.

Tower (with both feet)



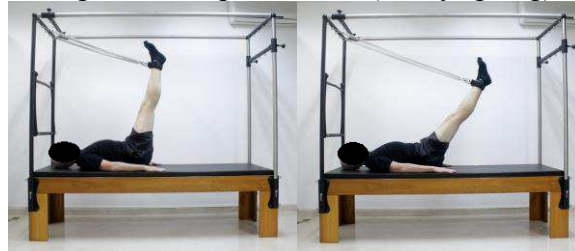
Objective: stretch hamstrings and gastrocnemius muscles and strengthen gastrocnemius.

Leg Series Supine Circle (mild spring)



Objective: strengthen gluteus maximus, hamstrings, adductor magnus, adductor longus, pectin and gracilis muscles.

Leg Series Supine Circle (heavy spring)



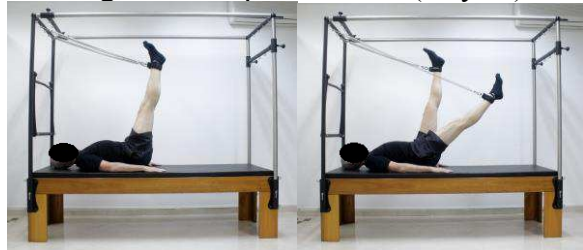
Objective: strengthen gluteus maximus, hamstrings, adductor magnus, adductor longus, pectin and gracilis muscles.

Leg Circles



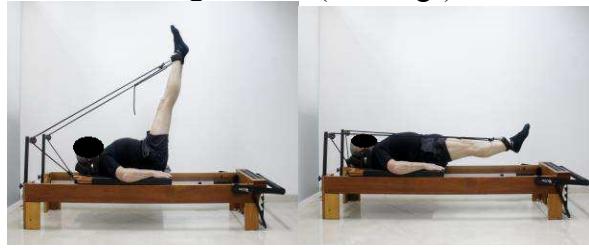
Objective: strengthen gluteus maximus, hamstrings, adductor magnus, adductor longus, pectin and gracilis muscles.

Leg Series Supine Lowers (bicycle)



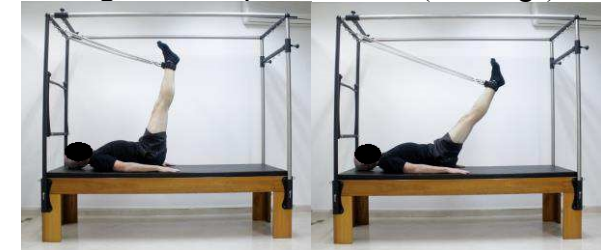
Objective: strengthen the gluteus maximus and hamstrings muscles.

Leg Lowers (both legs)



Objective: strengthen the gluteus maximus and hamstrings muscles.

Leg Series Supine Scissors (both legs)



Objective: strengthen the gluteus maximus and hamstrings muscles.

Footwork Hells V Position



Objective: strengthen the quadriceps femoris, adductor magnus, adductor longus, pectin and gracilis muscles.

Leg Series Supine Frog (lower spring)



Objective: strengthen the quadriceps femoris, adductor magnus, adductor longus, pectin and gracilis muscles.

Leg Series Supine Frog (upper spring)



Objective: strengthen the quadriceps femoris, adductor magnus, adductor longus, pectin and gracilis muscles.

Footwork Double Leg Pumps



Objective: strengthen the quadriceps femoris and triceps surae muscles.

Pump One Leg Front



Objective: strengthen the quadriceps femoris and triceps surae muscles.

Pumping One Leg



Objective: strengthen the quadriceps femoris, triceps surae, hamstrings and sartorius muscles.

Pump One Leg Side



Objective: strengthen gluteus medius and tensor fascia lata muscles.

Side Splits (mild spring)



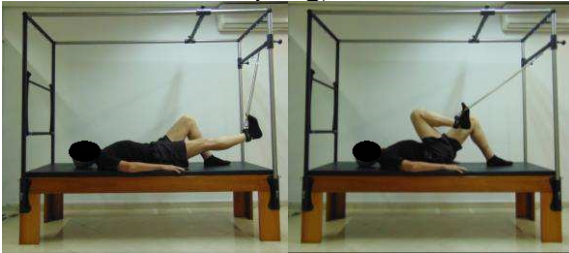
Objective: strengthen gluteus medius, minimum gluteus, tensor fascia lata and sartorius muscles.

Side Splits (heavy spring)



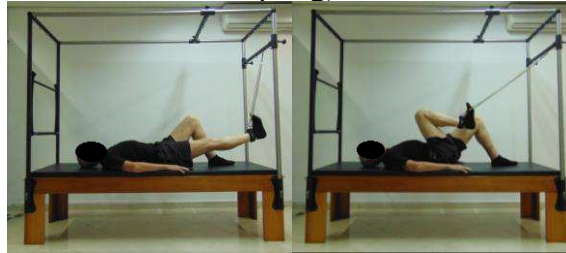
Objective: strengthen gluteus medius, minimum gluteus, tensor fascia lata and sartorius muscles.

Leg Series Supine (patient near the mild spring)



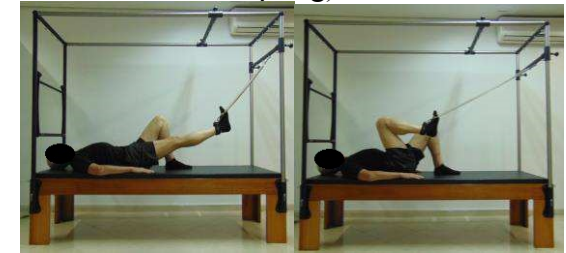
Objective: strengthen hamstrings, rectus femoris and rectus abdominis muscles.

Leg Series Supine (patient near the heavy spring)



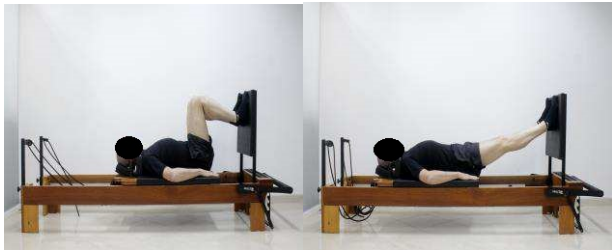
Objective: strengthen hamstrings, rectus femoris and rectus abdominis muscles.

Leg Series Supine (patient far from the heavy spring)



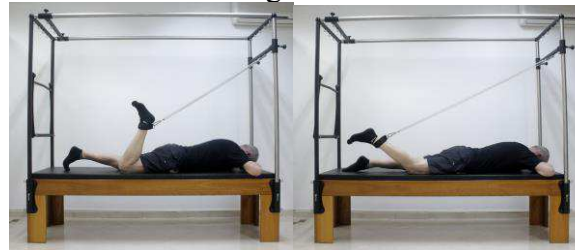
Objective: strengthen hamstrings, rectus femoris and rectus abdominis muscles.

Footwork Toes



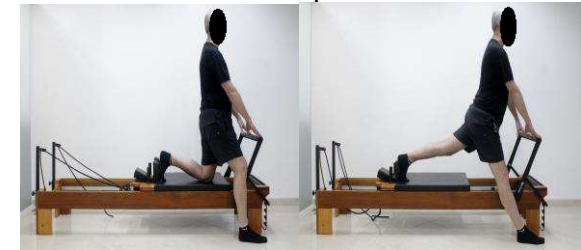
Objective: strengthen quadriceps femoris muscle.

Leg Series



Objective: strengthen quadriceps femoris muscle.

Front Splints



Objective: strengthen quadriceps femoris and gluteus muscles.

Footwork



Objective: strengthen quadriceps femoris muscle.

Footwork



Objective: strengthen quadriceps femoris muscle.

Going Up-Front



Objective: strengthen quadriceps femoris and gluteus muscles.

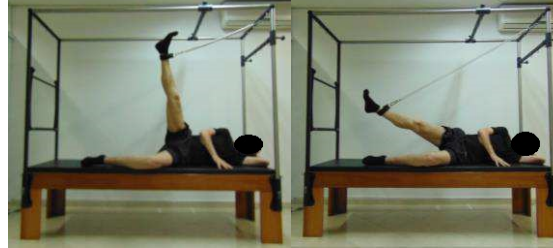


Leg Series On Side Up and Down (low spring)



Objective: strengthen adductor magnus, adductor longus, adductor minimum, pectin and gracilis muscles.

Leg Series On Side Up and Down (high spring)



Objective: strengthen magnus adductor, long adductor, adductor minimum, pectin and gracilis muscles.

Scissor Leg Side Lying



Objective: strengthen magnus adductor, long adductor, adductor minimum, pectin and gracilis muscles.

Stretches Front (patient and foot forward)



Objective: mobilize the spine and stretch hamstrings and triceps surae muscles.

Stretches Front (patient and foot sideways)



Objective: mobilize the spine and stretch hamstrings and triceps surae muscles.

Stretches Front (patient on the side and foot forward)



Objective: mobilize the spine and stretch hamstrings and triceps surae muscles.

Hamstring Stretch (sitting on Cadillac)



Objective: mobilize the spine and stretch posterior chain muscles.

Hamstring Stretch



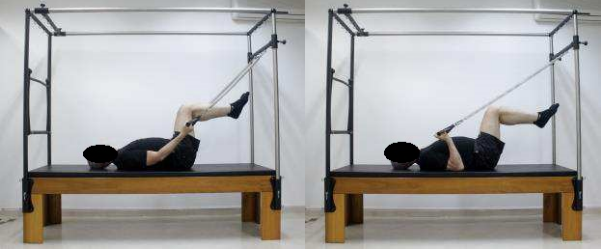





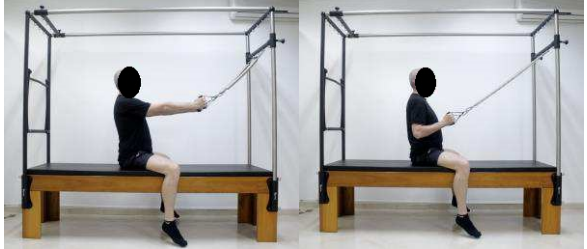


Objective: mobilize the spine and stretch posterior chain muscles.

Stretches Front



Objective: mobilize the spine and stretch gluteus and hamstring muscles.

## Upper Limb Exercises

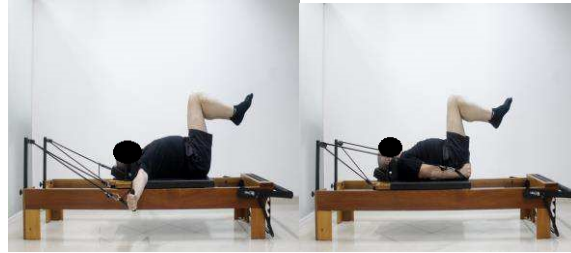
Basic	Intermediate	Advanced
<p><b>Arms Biceps (mild spring)</b></p>  <p>Objective: strengthen the brachial and brachial biceps muscles.</p>	<p><b>Arms Biceps Variant (heavy spring)</b></p>  <p>Objective: strengthen the brachial and brachial biceps muscles.</p>	<p><b>Arms Biceps Variant</b></p>  <p>Objective: strengthen brachial biceps, brachial, rectus abdominis, iliopsoas and rectus femoris muscles.</p>
<p><b>Arms Biceps</b></p>  <p>Objective: strengthen the brachial biceps, brachial and brachioradial muscles.</p>	<p><b>Arms Biceps</b></p>  <p>Objective: strengthen the brachial and brachial biceps muscles.</p>	<p><b>Arms Biceps Variant</b></p>  <p>Objective: strengthen the brachial and brachial biceps muscles.</p>
<p><b>Arms Pulling</b></p>  <p>Objective: strengthen the rhomboid, latissimus dorsi, posterior deltoid fibers, brachial biceps, medium and inferior fibers of trapezius and teres minor muscles.</p>	<p><b>Arms Pulling</b></p>  <p>Objective: strengthen the rhomboid, posterior deltoid, teres minor, infraspinatus, supraspinatus and medial and inferior trapezius fibers muscles.</p>	<p><b>Arms Pulling Variant (lying)</b></p>  <p>Objective: strengthen the rhomboid, posterior deltoid, teres minor, infraspinatus, supraspinatus and medial and inferior trapezius fibers muscles.</p>

Arms Pull Up and Down Variant



Objective: strengthen the pectoralis and latissimus dorsi muscles.

Arms Pull Up and Down Variant



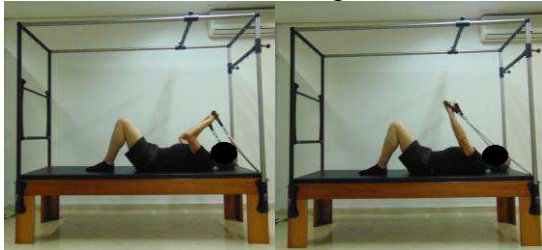
Objective: strengthen deltoid, latissimus dorsi, teres major, major pectoralis and coracobrachialis muscles.

Long Box Pulling Straps



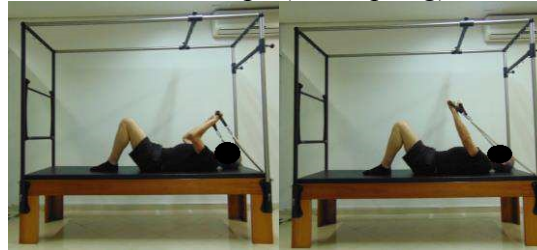
Objective: strengthen latissimus dorsi, teres major, pectoralis major and coracobrachialis muscles.

Arms Triceps



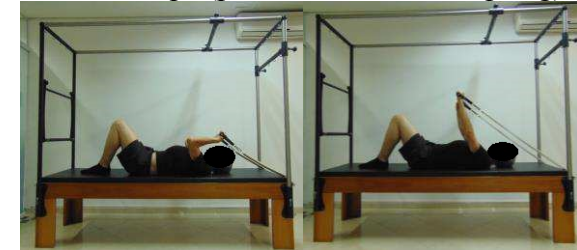
Objective: strengthen the triceps brachii muscle.

Arm Triceps (mild spring)



Objective: strengthen the triceps brachii muscle.

Arm Triceps (patient far from the spring)



Objective: strengthen the triceps brachii muscle.

Triceps Sit



Objective: strengthen the triceps brachii and anconeus muscles.

Triceps Sit On Foot Bar



Objective: strengthen the triceps brachii and anconeus muscles.

Triceps Front



Objective: strengthen the triceps brachii, anconeus and pectoralis major muscles.

**Abdominal Exercises**

**Basic**

The Hundred Variant



Objective: work coordination, stretch adductor, pectin and gracili muscles and strengthen the rectus abdominis, oblique and latissimus dorsi muscles.

**Intermediate**

The Hundred



Objective: work coordination and strengthen the rectus abdominis, external oblique, internal oblique, latissimus dorsi, teres major and quadriceps femoris muscles.

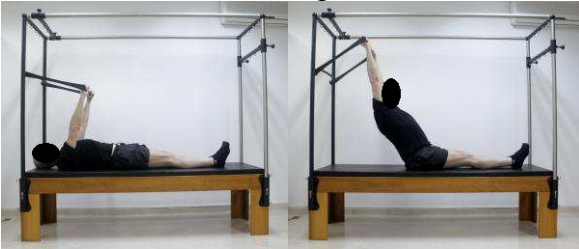
**Advanced**

The Hundred Variant



Objective: work coordination and strengthen the rectus abdominis, external oblique, internal oblique, latissimus dorsi, teres major and quadriceps femoris muscles.

**Sit-Up**



Objective: stretch anterior chain shoulder muscles and strengthen the rectus abdominis and external oblique muscles.

**Sit-Up Variant**



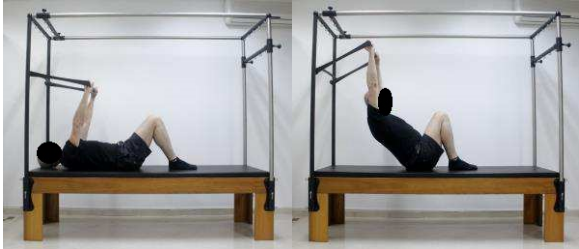
Objective: mobilize the spine and strengthen the rectus abdominis, external oblique and quadriceps femoris muscles.

**Sit-Up Variant**



Objective: mobilize the spine and strengthen the rectus abdominis, external oblique, iliopsoas and quadriceps femoris muscles.

**Sit-Up**



Objective: mobilize the spine and strengthen the rectus abdominis and external oblique muscle.

**Sit-Up Variant**



Objective: stretch anterior chain shoulder muscles and strengthen the rectus abdominis and external oblique muscles.

**Sit-Up Variant**



Objective: stretch anterior chain shoulder muscles and strengthen the rectus abdominis, external oblique, quadriceps femoris, and iliopsoas muscles.

