

## **Functional Exercises for the Knee Joints to Promote Recovery and Pain Free Movement**

Exercises are a significant part of all Functional Rehabilitation. Functional Rehabilitation should cover assessment and appropriate treatment for:

- \* Sensory function: proprioception and exteroception;
- \* Motor function: balance, coordination, reflexogenic participation in motion, strength, endurance, more;
- \* Issues pertaining and relevant to psycho-social-emotional-cognitive/mental-personal-spiritual / other problems related to joint function.

The following exercises are a contribution. They can be used for early stages of rehabilitation. These exercises can be done sitting.

Exercise #1: Press on patella (knee cap) with minimal displacement of patella in an inferior (towards toes) direction. Perform straight leg raising. The knee joint is slightly flexed.

Exercise #2: Press on patella with minimal displacement of patella in an inferior direction. While the knee joint is only slight flexed, move the leg (abduction) lateral.

Exercise #3: Press on patella with minimal displacement of patella in an inferior direction. While the knee joint is only slight flexed, move the leg (adduction) medial.

Exercise #4: Press on patella with minimal displacement of patella in an inferior direction. Start with a slightly flexed knee. Bend the knee.

Exercise #5: Press on patella with minimal displacement of patella in an medial (towards the other knee) direction. Perform straight leg raising. The knee joint is slightly flexed.

Exercise #6: Press on patella with minimal displacement of patella in an medial direction. While the knee joint is only slight flexed, move the leg (abduction) lateral.

Exercise #7: Press on patella with minimal displacement of patella in an medial direction. While the knee joint is only slight flexed, move the leg (adduction) medial.

Exercise #8: Press on patella with minimal displacement of patella in an medial direction. Start with a slightly flexed knee. Bend the knee.

Exercise #9: Press on patella with minimal displacement of patella in an lateral (away from other knee) direction. Perform straight leg raising. The knee joint is slightly flexed.

Exercise #10: Press on patella with minimal displacement of patella in an lateral direction.  
While the knee joint is only slight flexed, move the leg (abduction) lateral.

Exercise #11: Press on patella with minimal displacement of patella in an lateral direction.  
While the knee joint is only slight flexed, move the leg (adduction) medial.

Exercise #12: Press on patella with minimal displacement of patella in an lateral direction.  
Start with a slightly flexed knee. Bend the knee.

## **A Technique for the Early Intervention and Chronic Distress of Chondromalacia**

Integrative Manual Therapy: A technique to alleviate the pressure - related compression of the patella on the femur can be performed by the person at home, in the sports field, in the gym, at any time. This technique will take 5 minutes to perform. There are no precautions or contraindications.

### **De-Pressurization Technique for the Patella**

Sit Down. Bend the knee slightly.

Place all fingers of both hands along the top of the patella (knee cap).

Press with all eight fingers, on the top of the patella, towards the floor.

Maintain this pressure on the top of the patella for 3 minutes.

Stop and relax the fingers for 1 minute.

Then repeat the same force on the patella for another two minutes.

Use only 1 lb of force. Do not press too hard.

## **Reflex Ambulation Therapy (see Green IMT Book)**

### Ambulation Synchronizers

\* Synchronizers are reflex points, which can augment results. Contact the synchronizer during the technique.

The Actin/Myosin synchronizer is at the junction of the mesosigmoid and the sigmoid colon (front of left hip area). Anterior hip medial to ASIS.

a) to the muscle belly and the antagonist

The Tetanic Flow of Impulses into the Motor End Plate synchronizer is on either side of L1 Transverse processes, 3 cm lateral from the transverse process (in the low back, just below the ribs) a) to the muscle belly and the antagonist

Trigger of Calcium Spill from Sacroplasm / Extra Synchronizer for SCS: on the lateral aspects of C2 spinous process.

a) to the muscle belly and the antagonist

Breakdown of Afferent and Efferent Flow / Extra Synchronizer for SCS: Lateral to the transverse processes of C4 a) to the muscle belly and the antagonist

Head Control/OccipitoAtlantal Traction synchronizer situated on both parietals, 3 inches posterior from the coronal suture and one inch lateral from the sagittal suture (at the top of the head in the center).

Stimulation of Occipitosacral Traction synchronizer is situated on the parietals  $1\frac{3}{4}$  inches posterior from the coronal suture and  $\frac{3}{4}$  of an inch lateral from the sagittal suture on both sides (at the top center of the head).

Stimulation of Leg Protective Responses synchronizers on the parietal lobes which can be located 1 inch posterior to the coronal sutures and  $1\frac{1}{2}$  inches lateral from the sagittal suture (top center of head).

Stimulation of Tibiotalar Glides synchronizers are located 1 inch anterior from the ASIS on the pelvis. Place a finger on the anterior tip of the ASIS and bring that finger anterior from that point 1 inch. The synchronizer is located there on the soft tissues (at front of top part of each hip bone).

Subtalar Pressure synchronizers are located on both sides of the pelvis 1 inch anterior to greater trochanter and  $\frac{1}{2}$  inch superior from that point (sides of hips).

Focused and Synergistic Flexor Effect synchronizer can be located 1 inch lateral from the pubic symphysis and 3 inches superior from that point (3 inches above sides of pubic bone).

Stimulate Extensors synchronizers are located 1 inch inferior from the PSIS and 3 inches lateral from that point on both sides (3 inches away from center of the top part of the sacrum).

## **Reciprocal Motilities for Reflex Ambulation**

R Foot / Leg:

R Hip / Femoral Head: Flexion, Adduction, Internal Rotation

R Pelvis: Inferior Glide of Iliac surface; Outflare, External Rotation, Posterior Rotation

R Hand / Arm: Extended

Sacrum Flexes, Anterior Left Sacral Torsion (LOL), Rotates L / Sidebends L, Sacral base glides anterior

L5 Extended, Rotates Right, Sidebend R, R facet closed, L facet open, L5 glides posterior

L Foot / Leg: Weight on,

L Hip / Femoral Head: Extension, Abduction, External Rotation

L Pelvis: Superior glide of iliac surface, Inflare, Internal Rotation, Anterior Rotation

L Hand / Arm: Flexed

Treatment

Hold or have someone else hold Synchronizers / Reflex points while moving, walking, crawling

## **Solution for Health: An Exercise Approach for Self-Healing: Movement Potential Through Circulation Improvement (Toxic Joint)**

Goal:

2 minute exercises

Increase Mobility of the Trunk, Pelvis and Extremities

Reduce Musculoskeletal Aches and Pains

Starting Position: All exercise are to start and return to this beginning position

Advanced Strain and Counterstrain, developed by Giammatteo and Weiselfish-Giammatteo

Trunk

Let the arms move forward. Hands at shoulder level.

Let the left foot move forward.

One foot ahead of the back foot.

Bring the head and neck to the left. To the end of the movement possibility.

No stretch required.

Hold the position for 2 minutes.

Straighten up slowly.

Neck

Let the right arm move forward. Right hand at shoulder level.

Let the head and neck move to the left. To the end of the movement possibility. No stretch required.

Hold the position for 2 minutes.

Straighten up slowly.

Low Back

Let the right foot move forward. One foot ahead of the back foot.

Bend forward until the end of the range of spinal motion. No stretch required.

Move the left arm to the side. Left hand is at shoulder level.

Hold the position for 2 minutes.

Straighten up slowly.