

Managing Arthritis Pain with Exercise



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A little about osteoarthritis (OA):

- It affects about 21 million Americans
- It is the most common form of arthritis
- It affects bone cartilage; causing pain as the joints rub against each other
- Pain, stiffness, fatigue, and fear may discourage those with OA from exercise
 - Inactivity will INCREASE symptoms
 - It will make you weaker and less flexible
- Three types of exercise can reduce arthritis related stiffness and pain:
 - Flexibility and Stretching
 - Muscle conditioning (strength and endurance)
 - Cardiovascular conditioning (aerobic exercise)

Exercise Guidelines:

- The safest intensity for aerobic exercise is **moderate intensity**
- You should be able to speak normally
- You should not be out of breath
- **Thirty minutes** per day is the recommended exercise time
 - This may be accomplished in one or multiple sessions each day
- Pain is your body's signal to take action
 - Don't look at it as an ordeal you must endure
 - The exercise itself should not cause pain

Various forms of helpful exercise:

- **Flexibility / stretching:** gentle, low intensity exercises **performed daily** to maintain or improve range of motion
- **Muscle conditioning:** exercises designed to make muscles work harder than usual and **typically done every other day**
 - May be achieved by lifting the weight of the arm or leg against gravity, using weights, elastic bands, or weight machines
- **Cardiovascular conditioning:** the use of large body muscles in rhythmic and repetitive movements to improve heart, lung, and muscle function
 - **May be done daily**
 - May include swimming, aerobic dance, aquatics, biking, treadmills, ellipticals , etc.
 - Also includes daily activities such as mowing the grass, walking the dog, raking leaves, etc.
- **Relaxation/ Breathing exercises-** involves learning ways to be calm and in control to help relax muscles
 - May include yoga, tai chi, and relaxation audio tapes

How to begin an exercise regimen:

- The content and progression of an exercise program differs with each individual
- Talk to your health care team before starting an exercise regimen, especially if you have long-standing, severe disease or multiple joint involvement
- The most successful exercise programs begin with the knowledge and support of people who are experienced with arthritis and exercise. **Call IMGPT to schedule an appointment.**
- Begin with only strength and flexibility exercises and slowly incorporate cardiovascular and endurance exercises
- Check with your physical therapist and adjust your exercise program if you experience:
 - Unusual or persistent fatigue
 - Sharp or increased pain
 - Increased weakness
 - Decreased range of motion
 - Increased joint swelling
- Make your exercise program a part of your daily routine so it becomes a lifelong habit!

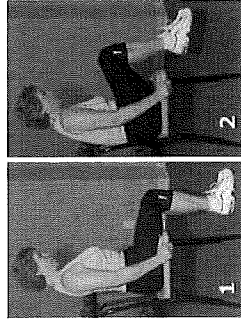
Simple Strengthening Exercises

GUIDELINES:

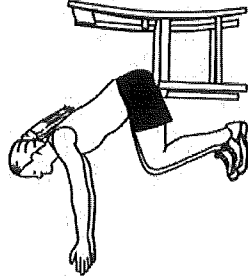
- Strengthening exercises should be done 3-5 times per week depending on soreness
 - If you are sore from an exercise take a day off
- Exercises should not cause pain
- Exercises should be done until you feel that your muscles are getting tired.
- If the indicated number of repetitions is too easy do more repetitions.

Legs

Knee lift: Sit in a chair. Slowly lift one knee at a time, keeping the knee bent. Alternate left/right. Let your hands rest by your sides; "hold" with the abdominal muscles rather than with your hands on the chair. Don't lift both knees together as pictured below. Perform 2 sets of 15.



Minisquats: With a chair behind you for safety, hold onto pole or counter-top and lower body weight as if you are about to sit in a chair. Return to an upright position after lowering to an angle of 90 degrees. Be sure to not allow knees to bend over toes. Do 2 sets of 15

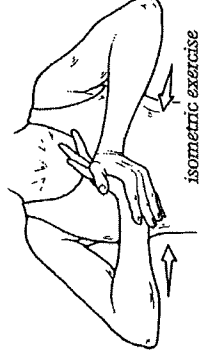


Quad Sets: Prop towel under ankle and press knee down towards the ground. Hold for 10 sec. and repeat 10 times

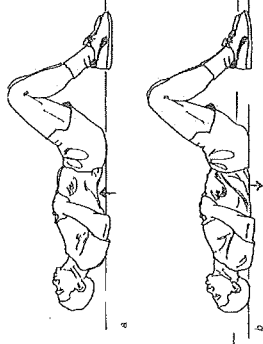


Chest and torso

- To strengthen the muscles of the chest: Place your hands in front of your chest, palms together, elbows at sides. Press your palms together, holding for a count of five. Keep breathing. Repeat 10 times.

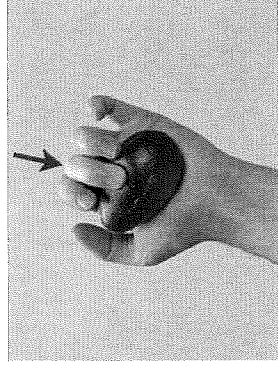


- To strengthen the abdominal muscles: Place one hand over your stomach. Inhale, then exhale, tightening your abdominal muscles while pressing your lower back against the floor. Hold for up to a count of 10. Inhale or breathe normally, relaxing your abdominal muscles. Repeat 10 times

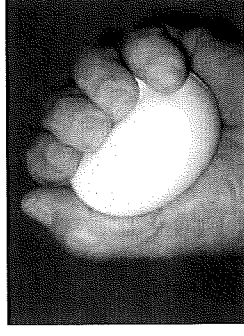


Hand/ Wrist

- Stress ball Exercise 1: While holding a stress ball in your hand alternate pressing each finger into the ball individually. Repeat 10 times with each finger



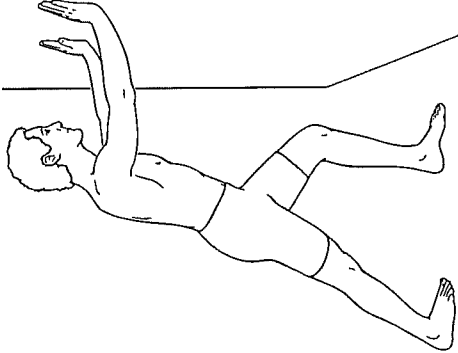
- Stress ball exercise 2: Squeeze the stress ball with your entire hand and hold for 5 seconds. Release slowly. Repeat 15 times in each hand.



HIP / KNEE - 41 Stretching: Gastroc

Stand with right foot back, leg straight, forward leg bent. Keeping heel on floor, turned slightly out, lean into wall until stretch is felt in calf. Alternate the front and back leg, repeat each leg 3-5 times. Hold 30 seconds.

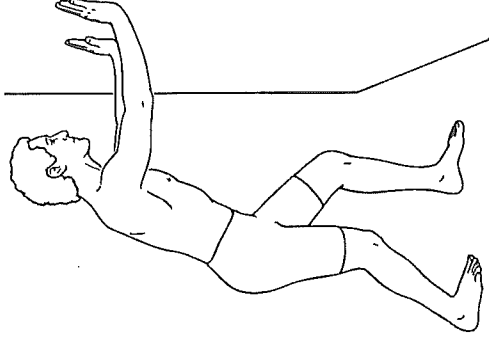
Repeat 3-5 times per set.
Do 1 sets per session.
Do 1 sessions per day.



HIP / KNEE - 42 Stretching: Soleus

Stand with right foot back, both knees bent. Keeping heel on floor, turned slightly out, lean into wall until stretch is felt in lower calf. Alternate front and back legs, do each leg 3-5 times. Hold 30 seconds.

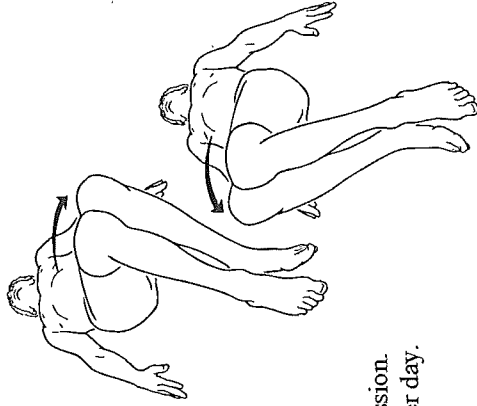
Repeat 3-5 times per set.
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BACK - 35 Lumbar Rotation (Non-Weight Bearing)

Feet on floor, slowly rock knees from side to side in small, pain-free range of motion. Allow lower back to rotate slightly.

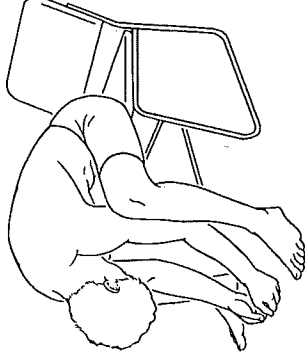
Repeat 10 times per set.
Do 1 sets per session.
Do 1 sessions per day.



BACK - 17 Lower Back Stretch (Sitting)

Sit in chair with knees spread apart. Bend forward to floor. A comfortable stretch should be felt in lower back. Hold 30 seconds.

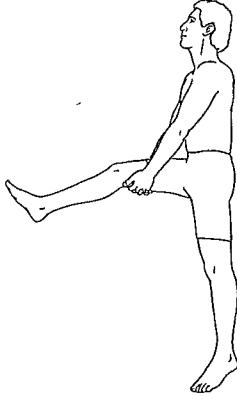
Repeat 3-5 times per set. Do 1 sets per session.
Do 1 sessions per day.



HIP / KNEE - 38 Stretching: Hamstring (Supine)

Supporting right thigh behind knee, slowly straighten knee until stretch is felt in back of thigh. Hold 30 seconds. A towel may be used to wrap around the right foot and help pull the right leg back. Stretch should be felt in the back of the right leg. Perform stretch on the left leg after stretching the right leg.

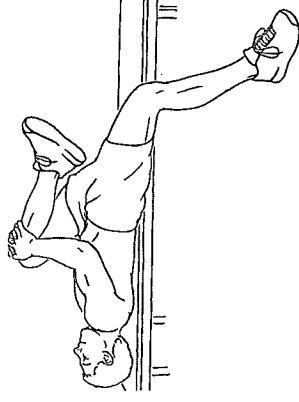
Repeat 3-5 times per set. Do 1 sets per session.
Do 1 sessions per day.



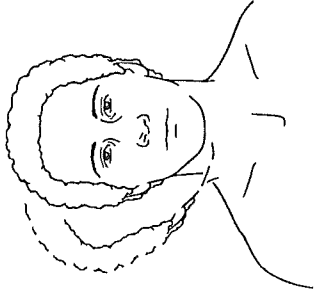
SPINAL MOBILIZATION - 32 Pelvic Rotation: Knee-to-Chest (Supine)

With right leg hanging over side of bench, other knee to chest, relax leg as much as possible. Hold 30 seconds. Relax. After stretching the right leg perform stretch on the left leg.

Repeat 3-5 times per set. Do 1 sets per session.
Do 1 sessions per day.



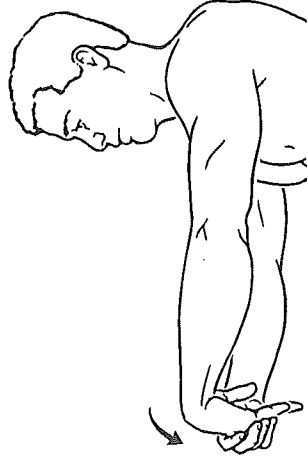
CERVICAL SPINE - 2 AROM: Lateral Neck Flexion



Slowly tilt head toward one shoulder, then the other. Hold each position 5 seconds.

Repeat 10 times per set. Do 1 sets per session. Do 1 sessions per day.

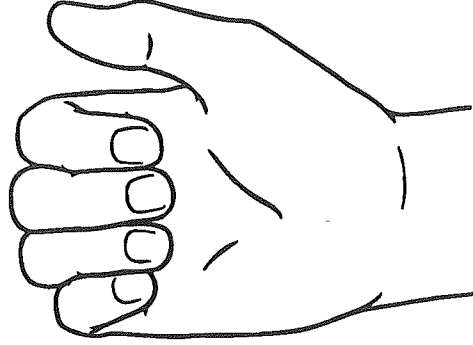
HAND - 14 Wrist Extensor Stretch



Keeping elbow straight, grasp left hand and slowly bend wrist forward until stretch is felt. Hold 30 seconds. Relax. Perform stretch on the right arm after finishing stretching on the left arm.

Repeat 3-5 times per set. Do 1 sets per session. Do 1 sessions per day.

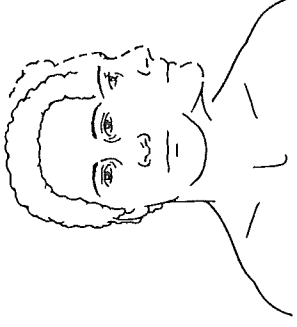
HAND - 8 AROM: Finger Flexion / Extension



Actively bend fingers of both hands. Start with knuckles furthest from palm, and slowly make a fist. Hold 5 seconds. Relax. Then straighten fingers as far as possible.

Repeat 10-15 times per set. Do 1 sets per session. Do 1 sessions per day.

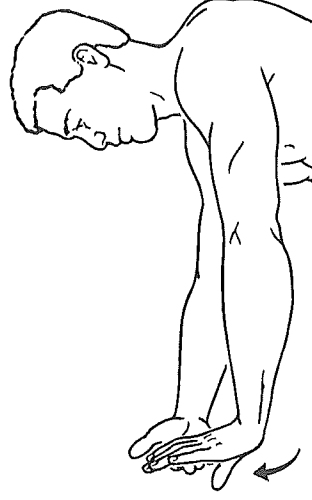
CERVICAL SPINE - 1 AROM: Neck Rotation



Turn head slowly to look over one shoulder, then the other. Hold each position 5 seconds.

Repeat 10 times per set. Do 1 sets per session. Do 1 sessions per day.

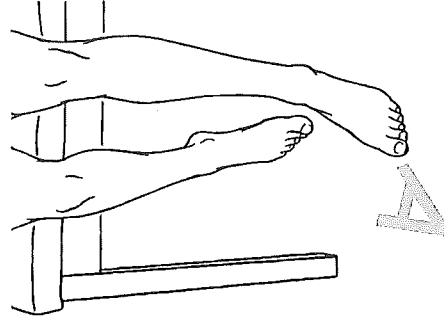
HAND - 13 Wrist Flexor Stretch



Keeping elbow straight, grasp left hand and slowly bend wrist back until stretch is felt. Hold 30 seconds. Relax. Perform stretch on the right arm after stretching the left arm.

Repeat 3-5 times per set. Do 1 sets per session. Do 1 sessions per day.

ANKLE / FOOT - 9 Ankle Alphabet



Using left ankle and foot only, trace the letters of the alphabet. Switch and do the right ankle and foot. Perform A to Z.

Repeat 2-3 times per set. Do 1 sets per session. Do 1 sessions per day.