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Rheumatoid arthritis is one of the commonest of joint problems causing pain and disability leading onto deformed joints, limitation of movements and finally joint replacement.

There is a vicious circle of joint pain, decreased mobility, and stiffness of muscles, decreased range of movement of joint, atrophy of muscles and again a joint which needs replacement.

Scientific studies have shown that physical activity can reduce pain, improve function, mood, and quality of life for adults with arthritis. Physical activity also can help manage other chronic conditions that are common among adults with arthritis, such as diabetes, heart disease, and obesity and prolong life.

Fact is when you have pain don’t stop exercising and rather change the type of exercise from isotonic you can come to isometric exercise.

Exercise more to decrease pain and feel more energetic? Regular exercise helps reverse joint stiffness, builds muscle, and boosts overall fitness. With regular exercise, you can feel stronger with less fatigue.

**How much physical activity do adults with arthritis need?**

- 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity per week OR
- 1 hour 15 minutes (75 minutes) of vigorous-intensity aerobic activity per week OR
- An equivalent combination* of moderate and vigorous activity.

**AND**

- Muscle strengthening exercises on 2 or more days per week.
- Balance exercises on 3 days per week if at risk of falling.
A general rule is that 1 minute of vigorous intensity activity = 2 minutes of moderate intensity activity. So we have different exercise plan but first you have to consult your doctor about the exercise plan.

Which exercises to choose from?

Exercise to build endurance:
Exercises build endurance and strong bones and also strengthen leg muscles. Low-impact aerobic exercises include stair climbing, walking, dancing, and low-impact cardio machines, like the elliptical trainer and these exercises can be done by patients of rheumatoid arthritis. Start by exercising a few minutes each day, adding more time as you can. Aim to exercise at a moderate pace, 30 to 60 minutes, five days in a week.

Exercises to Strengthen Muscles and Bones
These include resistance exercises and should be done two to three times a week to improve muscle strength and mobility and decrease joint pain. Stronger muscles decrease joint pain by better supporting the joints. Strengthening exercises also increase your metabolism and help you shed pounds. We can use elastic bands, free weights, or machines for resistance. Have a trainer (DVD on Prescription of exercise

Swimming for conditioning and strengthening:
Swimming is a great way to increase conditioning for all your joints, as well as to strengthen back, without putting excess stress on joints. Especially during pain episodes you can do underwater exercises in heated pools. Start slowly with just a few minutes in a heated pool. Use a kickboard when first starting to get used to moving in the water. Gradually build to a goal of swimming 30 minutes at a time. Increase physical activity with each exercise period until goal time is reached.

Healthy Body, Healthy Heart
Aerobic exercise helps build a healthy body and a stronger heart. People with RA are more likely to develop heart disease. Aerobic exercise reduces blood pressure and improves cholesterol. Because bone loss often occurs with RA, weight-bearing exercise like walking, dancing, and climbing stairs helps prevent osteoporosis.

Isometrics exercises
When regular strength training is painful on the joints, isometric exercise is another way to build muscle. Isometrics involve tensing the muscle without any visible movement here you use your own body muscles contractions as resistance and distance of muscle contraction is same, in isotonic exercises which we do with free weights or resistance machines weight or resistance is same but range of movement is variable. Some of these exercises are:
**Isometric Chest Press:**
With arms at chest level, press the palms of hands together as hard as one can. Hold the press for 5 seconds; then rest for 5 seconds. Do another 5 second press and a 5 second rest. Do 5 repetitions. Slowly build up to holding the press for 10 to 15 seconds at a time. If this exercise hurts your joints, ask a trainer to show you another isometric chest exercise. This is first step of Surya Namaskar of Yoga.

**Isometric Shoulder Extension**
This isometric exercise is done standing with your back against a wall and your arms at your sides. With your elbows straight, push your arms back toward the wall. Hold for 5 seconds, and then rest. You can repeat this 10 times. If this exercise hurts your joints, ask a trainer to show you another isometric shoulder exercise.

**Thigh Exercise**
This exercise strengthens the thigh muscles, quadriceps and hamstrings, which are a major support for the knees. Sit on the floor or a bed with one leg straight and the other bent. Then tighten the thigh muscles of your straight leg as hard as you can. Keep the thigh muscle tight and count to six. Relax, and then repeat. Do with the opposite leg, gradually increasing up to five, then 10, then 15 repetitions, twice daily with each leg.

**Stretching exercised to Increase Flexibility**
Regular stretching is important to increase flexibility and restore joint motion. To ease pain and stiffness, use moist heat or warm baths before and after stretching exercises. Also, warm up with light aerobic exercise such as walking for 10 minutes before stretching to decrease risk of injury. Hold stretches for 30 seconds without bouncing or jerking. Tip: Use a towel to bridge the distance between your hands if you cannot comfortably connect them.

**Stretching of Fingers:**
In RA fingers are mostly involved and to prevent disfiguration these exercises are a must!
Close fingers, making a fist. Then, open and extend the fingers as straight as possible. Repeat this exercise, gradually increasing up to 20 times, twice daily. To further increase strength, squeeze a foam or sponge ball about the size of a tennis ball. Release and extend the fingers.

**Keeping Wrists Flexible:**
This exercise is done sitting at a table or desk. With your left forearm on the table, let your left hand hang over the edge of the table. Using your right hand, grab the fingers of your left hand and bend your left hand at the wrist, slowly moving it up and then down as far as possible without pain. Repeat with the opposite hand. Increase up to 20 repetitions, twice daily.

**How to do an Elbow Stretch**
With your arm extended, parallel to the floor, position your palm face up. Using your opposite hand, grab hold of the fingers and pull the palm of the extended hand toward the floor. Hold for 30 seconds. Now, do the same exercise, except this time turn your palm face down. Using the opposite hand, push the top of extended fingers and hand down toward the floor. Hold for 30 seconds.

**Hip Rotation:**
Sit or lie on your back on the floor or on a bed, feet slightly apart. With your legs and knees straight, turn your knees in toward each other and touch the toes of your feet together, holding for 5 seconds. Now turn the legs and knees out, and hold for 5 seconds. Repeat this, gradually increasing up to five, 10, and then 20 repetitions, twice daily.

**For Flexibility of Feet**
Facing the wall, place palms flat on the wall, one foot forward, and one foot back. Leaving heels on the floor, lean
forward and feel the pull in the calf of your back leg and the Achilles tendon at the back of the ankle. Hold for 30 seconds. Do three repetitions. Then reverse the position of your legs and repeat.

**Tai Chi Increases Flexibility**
The ancient discipline of tai chi can help those with RA increase range of motion, boost flexibility, and tone muscles to provide better balance. The focus of tai chi is on breathing and creating an inner stillness, allowing participants to relax.

**Very important is to Avoid High-Impact Exercise**
High-impact exercises, such as jogging, running, or playing tennis on hard pavement, can put excess stress on joints. Lifting heavy weights may also not be the best form of exercise for people with RA. If you want to do more intense workout then better first consult doctor to work out how you can do more taxing exercises such as heavy weight lifting, tennis, basketball, or volleyball without risk of joint injury.

**TO AVOID FATIGUE:**
Fatigue is common with RA, making it difficult to feel energetic, so balance rest with exercise. During a flare, short periods of rest are important to reduce active joint inflammation and pain and to fight fatigue. This doesn't mean bed rest, unless your doctor recommends it. Too much inactivity weakens muscles and can increase joint pain.

Perhaps after consultation with your doctor you can go for a personal trainer

**KEY POINTS TO REMEMBER :**
- Any physical activity is better than none.
- Moderate, low-impact physical activity is safe for people with arthritis.
- Activity should be in addition to doing usual daily activities.
- Activity can be broken up into small amounts, at least 10 minutes at a time, during the day.
- More health benefits are gained with more activity
- The benefits of physical activity far outweigh the risks.

Don’t let the fact that you have rheumatoid arthritis stop you from exercising the way you’d like, so keep dancing and keep enjoying and Keep moving and your RA won’t affect your Quality of life.