What happens in hip osteoarthritis?

When a hip joint gets osteoarthritis (OA) the joint becomes painful and stiff and muscles become weak. When the hip is stiff, the lumbar spine (lower back) moves more. When hip muscles are too weak to keep the pelvis level during walking, the body may sway sideways with each step. These changes can increase low back discomfort. Keeping the hip joint flexible and strong helps balance forces in the joint, and nourishes the cartilage. It also helps reduce strain in other joints.

Common features of hip OA are:

• Pain and stiffness at the front of the hip or groin;
• Rotation stiffness that causes the toe to point outwards;
• Weakness of muscles which pull the leg out and keep the pelvis level;
• Weakness of the buttock muscles which pull the leg back, and
• Belly muscles too weak to stabilize the lower back.

What can I do about hip osteoarthritis?

Learn as much as you can about OA. Read A Guide for People Living with Osteoarthritis including the list of places to get more information.

• Maintain a healthy weight. When you walk fast or on stairs, the forces in your hip are seven times your body weight. Losing ten pounds means 70 pounds less pressure during those activities.
• A cane used in the opposite hand lowers hip pressures.
• Wear shoes that cushion and support. Consider custom insoles.
• Maintain aerobic fitness by walking, bicycling or swimming.
• Try the exercises on the back of this page. Start gently and increase slowly. If they don’t help, or if they increase pain, ask your doctor to recommend a physiotherapist (PT). A PT assessment will identify where you are tight, which muscles are weak, how your body compensates and what causes pain. A personal exercise program can be created for you.
• If exercise causes more joint pain for over two hours, do less next time.
1. **Strengthen belly muscles**
   Lie on your back with knees bent and feet flat. Tighten lower belly muscles by pulling your belly button down to your spine. Breath normally.

2. **Strengthen hip muscles at back**
   Lie on your back with knees bent, feet flat and belly tight. Squeeze buttocks and lift hips off bed. If this is too easy, try it one leg at a time.

3. **Strengthen hip muscles at side**
   Lie on your side with lower leg bent and top leg in line with your body. Lift the top leg without rolling your pelvis. Don’t lift leg high, just level.

4. **Stretch the front of your hip**
   Stand against a wall at an edge or doorway, so half your body leans against the wall. Tighten your belly muscles. Step back with the free leg just far enough to feel a stretch at the front of your hip. Keep your body touching the wall.

5. **Stretch hip rotation**
   Lie on your back. Slowly roll both knees and thighs inward, toward each other keeping knees straight. Return to starting position.

**Hold stretches for 20 seconds. Repeat 2 – 3 times. (daily)**

For advice about planning an exercise program, see *The Arthritis Helpbook* by Lorig and Fries, available at libraries, bookstores and The Arthritis Society.

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