

Anticipating Joint Replacement

Small Steps for Improved Recovery

Lesson Overview: According to the Journal of Bone and Joint Surgery, over 1 million total hip and knee joint replacement surgeries take place in America every year. Increased mobility and decreased pain are benefits that anyone at any age can appreciate. As soon as surgery is scheduled, rehabilitation is discussed. This exercise and therapy program is part of the plan that a patient is committed to follow for up to three months after the surgery. But, what if there was a way to improve outcomes of surgery and speed recovery?

Lesson Plan:

- Deliver content as noted below noting the relevance for those anticipating replacement or living with replacement.
- Lesson provides information on: What is Pre-habilitation, What does Pre-hab include, Looking to the future of Pre-hab, How can I get Pre-hab, Value of Rehab and maintenance.
- 2-page handout that includes simple exercises to consider for pre-hab and maintenance of replacement

What is Pre-hab?

Pre-habilitation is a therapy program that begins four to six weeks before surgery. The goal of pre-hab is to improve the patient's strength and functional capacity prior to surgery. It has been used for several years by many surgeons in joint replacement procedures. In the last few years, research has been looking at the benefits of pre-hab for those facing other types of surgery including cancer and abdominal procedures. Although more studies are anticipated, pre-hab has been shown to be beneficial. According to the Journal of Bone and Joint Surgery, a pre-hab program can reduce the need for post-operative care by nearly 30 percent. This can lead to a more rapid recovery. Decreased anxiety regarding the surgery and recovery has been noted as a benefit, as well. For other types of surgery, pre-hab has shown positive physical effects and fewer complications – this has led to lower costs for care and fewer hospital readmissions (Journal of the American College of Surgeons).

What Does Pre-hab Include?

Pre-hab programs may vary by facility on what the general program includes and also based on the type of surgery the patient is scheduled to undergo. Programs may vary depending on the patient's overall health, too. Always remember that a medical provider needs to prescribe and oversee all pre-hab and rehab programs.

All programs included in studies conducted include an endurance training (walking, riding a bike, or swimming) that increases the heart and breathing rates as well as, resistance training (wall push-ups, chair squats, leg raises, arm raises) to increase strength and flexibility. Both the endurance and strength trainings are geared toward increasing the patient's physical ability to perform daily functional tasks – not increase their overall athletic ability.

Many other programs include a nutritional component and stress reduction program. Smoking cessation is also provided when needed. Please note, the nutritional component has been used more in abdominal and cancer treatment surgeries where overall adjustments to diets and/or nutritional supplements may be needed to enhance recovery. Stress reduction has been used successfully for several types of surgeries, as well, but having the opportunity to meet those that will be involved in the rehabilitation process during the pre-hab program has been shown to reduce anxiety.

The Future of Pre-hab? How Can I Get Pre-hab?

If studies continue to show the benefits and cost savings of pre-hab in all types of surgery, we foresee more healthcare facilities providing this as part of their surgery program. At this time, not all insurance companies will pay for the pre-hab program and/or have a limited number of times a patient can have physical therapy. When physical therapy services are limited, most healthcare teams determine to utilize these all for post-surgery rehabilitation. Pre-hab in all types of surgeries may have merit though and should be considered.

The Arthritis Foundation noted in one article that insurance is the most difficult obstacle. Everyone preparing for surgery should check with their individual insurance company. Some may pay for the pre-hab treatment or physical therapy sessions. If your insurance company does not pay for pre-hab, talk to your doctor. Some hospitals and healthcare groups may offer the services as part of a free pre-surgery education course. Although physical therapy can be costly, one might consider paying for two or three sessions to develop a personal regimen to do on your own prior to surgery.

Is There Value to Post-Rehabilitation (*physical therapy*)?

Most studies continue to show value in post-rehabilitation or “*physical therapy*” after joint replacement. One of the concerns of many individuals are primarily concerned with is overall pain management in the replacement surgery and recovery. The *Journal of Arthroplasty*, noted that early physical rehabilitation reduces pain and swelling which accelerates recovery time and improves overall mobility. When a patient is able to recover more quickly – this points to the larger benefit of the individuals ability to get back to their daily activities and routines in a shorter time-frame.

Another great benefit was noted in *Journal of Orthopaedic & Sports Physical Therapy*. Targeted therapy enabled individuals to regain muscle strength which is essential to maintaining a stable joint. Having a stable joint can possibly prevent future injuries. Long-term adherence to physical therapy can assist in maintaining the joint stability and lower the risk for further complications.

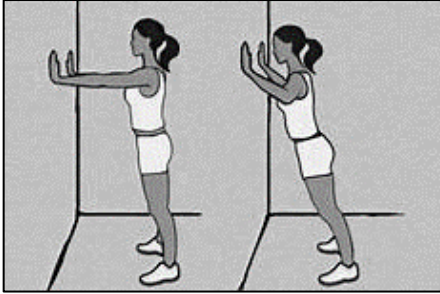
References used for lesson content:

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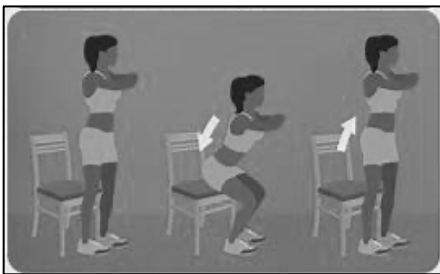
HANDOUT

Strength & Flexibility*

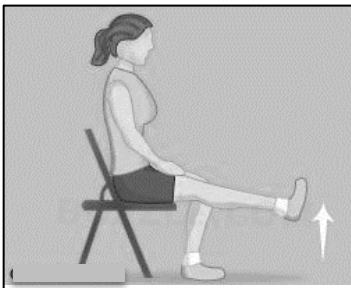
*always talk to your physician before starting any new program



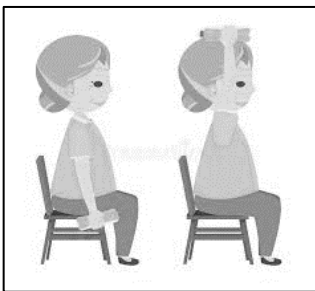
Wall push-ups



Chair squats



Leg raises



Overhead arm reach



Seated toe stretches

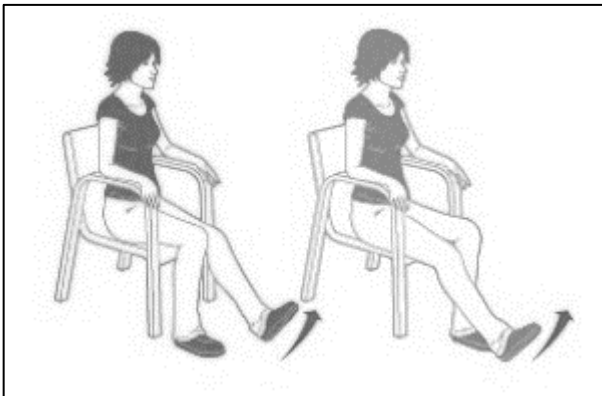
Endurance Training*

*always talk to your physician before starting any new program

Remember to **START SLOW**. If you have pain, shortness of breath, or tightness in your chest – **STOP**. Consider some easy activities to start. Walk to your mailbox, take your dog on a short walk, walk around the block, ride a recumbent bike while watching television, or march/walk in place as you sit in your chair during the commercials. Any increase is a good change – it doesn't have to be **HUGE**.



Seated walk/march



Seated heel touch (w/punch)

Stress Relief

Breathe Deeply

Take a 5-minute break and focus on your breathing. Sit up straight, eyes closed, with a hand on your belly. Slowly inhale through your nose, feeling the breath start in your abdomen and work its way to the top of your head. Reverse the process as you exhale through your mouth.

Laugh Out Loud

Laughter is “good medicine”. It lowers cortisol, your body's stress hormone, and boosts endorphins, which help your mood. Lighten up by tuning in to your favorite sitcom or video, reading the comics, or chatting with someone who makes you smile.