

Sensory Integration for Pre/Post-Surgery Rehabilitation

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Growing research shows that a combination of hands-on therapy and other non-drug measures can be just as effective as more traditional forms of orthopedic care, including drugs and surgery. Earlier this year (February 2017), the American College of Physicians (ACP) – which represents primary care doctors, issued new guidelines for back-pain treatment, saying that the first line of defense should be non-drug measures. (Consumer Reports, June 2017).

To benefit from the “Sensory Integration for Pre/Post Surgery Rehabilitation” workshop, the following needs to be adhered to as “Functional Therapy”.

The exercise is a premeditative physical activity and one of the key components in a healing regimen for those in pre- or post-surgery conditioning. **Sensory Integration** is a phenomenal tool with positive impacts to patients mentally, physically and emotionally by improving the functional performance of the body by stimulating and using the brain’s natural process of sensory motor learning.

Not all injuries are created equal. Overstretched or injured muscles, tendons, or ligaments can result in strains, sprains, or spasms. Poor posture, prolong sitting, strenuous work, and repetitive action can stress “soft tissues”. Lifting, pulling, bending or twisting puts pressure on the disks, which can cause them to bulge or slip. Degenerative joint changes or spinal instability may resolve over time with less aggressive therapies and taking that approach is safer than surgery. An operation should be considered only if an imaging test confirms an abnormality.

Rehabilitation’s purpose is to RESTORE the FUNCTIONAL ABILITY of the body and can start as **pre-surgery conditioning** whose purpose is to prevent the pain sufferer from physical inactivity. Physical activity is the key to prevent muscular weakness, stiffness of ligaments and tendons, all of which can delay recovery. The most efficient way for **post – surgery rehabilitation** is when it starts in the water and then gradually includes exercise on land as the client progresses in recovery and gains confidence to move again. It starts with physical therapy, which is a form of treatment that involves segment of the locomotors system in either not immobilized at all or the immobilization is incomplete and last only limited time. When the function of the acute area is recovered, post- surgery rehabilitation can start in form of functional fitness training, and its goal is to prepare patients/ client body, that he/she can perform daily activities -- walking, bending, lifting, climbing stair- without pain, injury or discomfort.

Water exercise is an ideal choice for this physical activity as the addition to the list of nondrug therapies. Using sensory integration in a water exercise program multiplies its benefits such as strengthening the core (abdomen and back muscles), improving balance, coordination and flexibility and helping to restore healthy posture. Stress and tension can worsen the pain. People enduring pain for three months or longer can also suffer from depression or another mood disorder. That means that pain can amplify depression and anxiety, and vice versa. Hydraulic pressure increases blood flow to injured areas and relaxes muscles. These triggers the release of endorphins- to decrease stress and anxiety associated with pain. Over the long term, this will create more body awareness and cause to notice bad habits (picking up heavy objects the wrong way, carrying handbag or laptop case with the same hand or over the same shoulder).

The goal of a pre- and post- surgery exercise prescription is to individualize an exercise program through functional fitness and to create positive physiological responses in the patient’s/client’s body. It will also encourage to practice and learn to synchronize physical movements, meditation, and breathing.

Resources:

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