

## Rehab Potpourri

This series is designed to have a lay article next to a professional article. But the current lay article, risky times for the back, is too obvious to rewrite for the professional article. Oh, I could talk about creep in ligaments, I could talk about the excessive fluids in the discs after sleep. I suspect this would be boring for you.

So, instead, here is a rehab overview. First, I think it is useful to divide our patient self care exercises into five basic categories. Don't get overwhelmed, it will all make sense as a whole.

The first is pain relief. McKenzie comes to mind for the disc. Dontigny's basic single leg hip and knee flexion for the SI, or for any flexion biased patient. Cat and camel, done on all fours, is both a great warm up, and gives relief. Let's not forget a simple rest position, lying on a carpeted floor with the knees and lower legs up on a chair. If all of our lower back patients took 10 minutes in the middle of the day, and rested their backs, they would do better.

The second type of exercise is self mobilization. This needs to be specific for the area of the body that is stuck. DonTigny's flexion works wonders for a stuck Sacro-iliac. For a disc, self mobilization is not aimed at the involved disc or its vertebral segment, which most likely is hypermobile due to inhibition and delayed firing patterns in its key stabilizers, the multifidi and the psoas. Decompression is a slight variation on self mobilization, and is very useful for a disc patient. When the patient displays a recurrent specific fixation pattern, such as L4 resisting extension and L rotation, I will attempt to show them a way to use contract-relax to release that area themselves.

Stretching is related to self mobilization, but is aimed at tight, short muscles. Janda laid out the model, which has stood both the test of time, and of more rigorous research. Too often, stretching is done poorly, and can do more harm than good. First, don't stretch just before an athletic event, as it inhibits key muscles. Second, aim at the muscles, use co-contraction to maintain a neutral posture. One of the worst offences I see here are patients trying to stretch the pectorals, who end up stretching the shoulder joint capsule. I also see many hip flexors stretches which are excessive, taking the lumbar spine into hyperextension, and taking the ilium into its loose packed anterior rotation position- a very dangerous positioning for a hypermobile sacro-iliac.

The fourth type of exercise is stabilization or core training. I could subdivide this two ways. The first type of stabilization would be aimed at motor control, waking up inhibited local and global stabilizers. The second would be variations on functional training, where the goal is to strengthen the core musculature under the types of loads occurring in everyday life. This would usually involve asymmetric challenges, where the core has the job of slowing or stopping excessive motion.

The fifth type of exercise is strength training; this is what the typical patient does in the gym, including bench press, leg presses and others. These are usually symmetric, and use

the largest global muscles to develop pure strength and explosiveness. If you do these in a machine, it doesn't challenge the stabilizers as much. If you do them with free weights, especially while weight bearing, you get more of a challenge to the core stabilizers. There are obvious overlaps here. A squat fits into stabilization, core training, and strength training.

So, what does your program for your lower back patient look like? If the patient is already an exerciser, it might look something like this. Watch them do their stretches, and correct obvious errors. Always emphasize form and quality of movement over repetitions and gross strength. I know you are going to find the fixations and correct them with adjustments. If they recur, show the patient self mobilization for their typical fixated areas. If they sit too much, and/or if you suspect discogenic involvement, show them simple decompression tools to be used frequently. If they are in pain, make sure they know what exercises will help decrease the pain. Use functional testing to assess what core muscles are not working properly, and have them focus on addressing these issues. Have them pay attention to their core through maintaining neutral spine and using co-contraction in their daily activities and in their strength training. Don't forget breathing; emphasize proper abdominal and lower rib cage inhalation, and encourage the patient to breathe fully during exercise.

OK, I know I never make it quite as simple as you would like, but a basic rehab program is doable. Who is better qualified than you? For back pain patients, the ideal rehab addresses fixated areas, you are the only one who is going to do that accurately. For back pain patients, a diagnosis adds to the specificity of the rehab. Who else is going to integrate a diagnosis into the rehab program?

One of the main benefits of rehab in my practice is simple. I attract better patients. They are motivated, they want to take care of themselves, they participate. Some come in just expecting to be fixed, but if you have a rehab oriented practice, they can learn to be part of the solution. Your patients either give you back energy or suck your energy. If you do rehab, you will have many more patients who are part of the process and give back to you.