

## **Life-styles Management for**

### **PATIENTS WITH SPINE PROBLEMS ( or Dr. Wailes' Golden Rules)**

For patients with spine conditions, knowing how to properly care for the spine and keep it injury-free is essential. The following information will help expose you to exercises and life-style choices to maintain a healthy spine. Please note that any reference to the "spine" or "back" includes the neck (cervical spine), mid-back (thoracic spine) and the low back (lumbar spine).

#### **A Commitment to Health and an Injury-Free Spine**

The spine injury patient, more than most others, is faced with critical life-style choices that can make a tremendous difference to their long-term recovery and continuing health. These choices involve two simple concepts. First, a commitment to the maintenance of good general health. Second, a commitment to a regular exercise program. Philosophically, every patient needs to accept full responsibility to do everything within their power to help their condition.

It is important to remember that exercise alone does not cure most back problems and nothing can reverse arthritis or degenerative disc disease but, long-term life-style change is still probably the most helpful thing you can do to prevent future problems.

#### **Good General Health**

Taking care of one's own general health is fundamental to controlling and minimizing back problems. Because those with back problems are frequently bothered by ongoing painful symptoms, it is especially important that they maintain their overall health at the highest possible level.

The most important element of good general health for many back patients is the maintenance of an optimal weight. For those with spine injuries this is especially important, because overloading the back with excess pounds only aggravates the problem. One can imagine the extra stress on the back when carrying an extra 30-40 pounds all day long! While weight loss is very difficult for most people, as a preventative measure to treat ongoing back problems, it is essential. If you seek further advice regarding weight loss programs, I recommend discussing this with your primary care physician.

#### **A Regular Exercise Program**

Exercise is important for all patients with spine injuries. It provides greater support and strength for the spine itself. It also increases the patient's range of motion and flexibility, thus preventing further injuries. Of course, there may be significant limitations with some types of problems, but with the correct type of exercise such limitations are fairly rare.

#### **Responsibility**

Continuing on a regular exercise program is a very good example of being responsible for your own health. While maintaining such a program is challenging for almost everybody, it is especially hard for patients who have significant discomfort with activities. Unfortunately, these are the patients who need it most.

## **A Vicious Cycle**

Without a regular exercise program, patients with back problems may become mired in a vicious cycle where inactivity leads to further weakness. A sedentary life-style causes further weakness and decreased strength, and can also cause significant decreased range of motion, muscle spasms, cramping, and a greater likelihood of injury to the nerves, bones and joints. The spine does best when patients work to maintain their flexibility, range of motion and the strength of its supporting musculature as much as possible.

## **Exercise Discomfort**

Any type of exercise may cause discomfort. Many patients will not exercise because of discomfort. This can be a mistake. With proper instruction to ensure that exercises are correctly performed they are unlikely to cause significant injury. This does not rule out the possibility of re-injury at some point in time, but learning specific back exercises from a licensed physical therapist or other health care specialist will give you the greatest chance of success and least chance of injury.

You should know that most back exercises can be done even by people who are very disabled. And for those who have not exercised much in the past, they can gradually do more and more exercises, building their strength and ultimately their health.

## **Great Expectations**

You should not expect to get immediate results from any exercise program. Improvement with increased strength and flexibility occurs over many months and years. An exercise program is a change in your life-style -- not a quick fix for a particular problem.

## **Start Gradually**

It is critical to start an exercise program gradually. (After all, Rome wasn't built in a day!) You may cause some mild injury or stretch to the nerves which won't be apparent until the following day. Many people won't realize how hard they were straining their muscles or joints until the next day, when they wake up stiff and sore. Because of this it is important to start very slowly and increase gradually, even if you are not having significant pain or symptoms at the time of exercising. Furthermore, one should set very realistic goals regarding the increases in exercise so you don't set yourself up for failure. If your expectations of yourself are too high or unrealistic, you will only become frustrated.

## **Types of Exercise**

There are basically two different types of exercises which are important to the patient with back problems. One group of exercises is specifically related to maintaining flexibility, range of motion and strength for your spine. The other group is more generally applicable for cardiovascular and overall fitness. Both types are important for the maintenance of a healthy back.

### **Type I: Back Exercises**

Every patient with spine problems should be doing twenty minutes of specific back exercise at least once a day (ideally twice). These exercises should be done on a very consistent basis, ideally at the same time every day. Making a habit or routine out of an exercise program is critical to maintaining long-term success.

A regular specific back exercise program should include 7-10 different exercises designed specifically for range of motion and strengthening of the supportive elements of the spine. These types of exercises are specifically designed to not cause injury.

If you do not already have specific training in a back exercise program, please let us know. We would be happy to refer you to a licensed physical therapist or other specialist who can

give you the appropriate training you need to learn a back exercise routine. If you have already been trained to do back exercise, begin immediately in a very slow and gradually increasing program. Start with just a few repetitions of the exercises and gradually build up to 15-20 repetitions of each maneuver. Over time you can gradually increase your stretch and/or strength used in each specific exercise as well.

### **Type II: General Fitness**

The second type of exercise program maintains your general fitness. Studies have shown that good cardiovascular and general fitness will improve many types of back problems. This type of program should be done at least three times a week for 20-30 minutes.

There are many different types of exercises that maintain general fitness. It is important to carefully select your activity, however, because many types of aerobic exercises may cause injury to your back. Here are some suggested general fitness activities that are easy on the back:

**Swimming or aqua therapy:** This is probably the safest type of exercise for the back. When one is swimming, normal gravity is offset by the flotation in the water. This enables many people to exercise much more effectively with less fatigue compared to working out on dry land. There are excellent aqua therapy programs available for all ages. Two programs in the immediate area include:

#### **Mary Lou Clack Swim Center in Vista**

A warm water pool with easy access in and out of the pool. Regular exercise programs and instruction available. Call (760) 758-0812 for more information.

#### **Carlsbad Boys and Girls Club**

This program has regular scheduled classes in aqua therapy. Call (760) 729-0956 for more information.

**Stationary bicycle:** This is a type of general aerobic exercise which is helpful for many patients. A stationary bicycle has the advantage of allowing you to exercise without any impact or jarring of the body -- important in most spine injuries. Furthermore it provides an excellent cardiovascular workout and increases muscle tone in many different muscle groups throughout the body.

Again, it is important to start gradually and slowly build up over time with very attainable and realistic goals. You may start out with a slow pedaling session for five minutes, increasing your pedaling time and intensity every few days.

**Standing or upright position exercises:** A third type of aerobic or general fitness group of exercises are activities performed in the standing or upright position. You should avoid exercises in this position that involve significant impact, including running or full impact aerobics. Examples of low- or no-impact exercises in the upright position include NordicTrack or StairMaster-type devices.

**NOTE:** Patients whose back problems generally occur with standing or walking should avoid standing or upright exercises. Many patients over 65 have increased low back and/or leg pain with standing and walking. They should do one of the other types of exercises to avoid causing increased nerve root irritation in the back.

## **Medical Treatments for Spine Injury**

### **Epidural Steroid Injections**

If you recently had epidural steroid injections, you should note that this is only part of your overall pain management program. Steroid injections are designed to allow **healing of the injured nerve roots** that may have been causing your pain. The benefit for patients is that epidural steroids work by healing the injured nerve roots, not by covering up the pain. These injections allow the nerves to go back toward their normal anatomy with less swelling, redness and irritation (and thus less pain).

Because they do not mask or cover up the pain, but rather allow healing, epidural steroid injections do not "wear off." On the other hand, it is possible for the pain to return anytime the nerves of the spine are re-irritated or re-injured.

For most people it does not take a fall or accident for the nerves to be re-irritated. If your spine problems are severe enough, the nerve root irritation may return with even simple day-to-day activities, such as walking or standing.

### **Other Alternatives**

If your painful symptoms return soon after epidural steroid injections, then you need to consult further with Dr. Wailes or his associates about other treatment alternatives. Usually there are still other alternatives for the treatment of severe back problems. Some of the other alternatives include rehabilitation programs, medication trials, psychological techniques, nerve stimulators, infusion pumps, and surgery, among other choices.

### **It's Your Choice**

Nobody can take care of your back better than you can. If you are able to control your weight, take care of other medical problems, and exercise regularly, then you have a much greater chance at living a longer and more comfortable life.

If you have further questions regarding specific types of exercise, please feel free to ask Dr. Wailes or his associates, or a licensed physical therapist. We wish you the greatest success in maintaining a healthy spine.