

Dr. Stanfield's Guide to Neck and Back Pain

**Criteria for
Elective Surgery**

**Treatment Options
and Preventative
Measures**



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Intended for educational purposes only

Each patient is unique. The information provided in this document is not intended to be used as direct medical advice. Neck and back pain can be caused by cancers, vascular diseases, infections and many other serious conditions. While most back and neck pain is related to the normal process of aging, no pain should be treated without first being evaluated by your physician. Being evaluated by a physician will help reduce the chances of more serious causes for neck and back pain going undiagnosed and untreated.

Introduction

The goal for all treatments related to neck and back pain is to remove pain and restore function whenever possible so that patients can continue doing the things in their lives which, to them, are of most importance. The vast majority of patients who come to see me do not need surgery. What benefits most patients is good information. Learning why we hurt, how our body ages, how we can treat problems most effectively and what we can do to prevent problems in the future is what can be more helpful to most people than any surgical intervention. This document is a guide designed to help teach patients about neck and back pain in an effort to avoid surgery whenever possible and appropriate. Even in those patients where surgery does become necessary, these treatment options can often still be very helpful.

The goal of this document is to help you learn as much as you can about your neck and/or back problems so that our time together (for those planning to see me in clinic) can be utilized more efficiently. The more you learn before your appointment, the more time I can spend understanding what ails you and answering questions you may have. I am a firm believer that the most important aspect of a physician's job is to be a good teacher. This begins with being a good listener, but then continues by being a good communicator. A patient needs to fully understand not only the problem they may be

experiencing, but of equal importance is for each patient to fully understand the options which exist to treat such problems. A physician should never make any decisions for a patient. All care should be directed by the patient. It is only the patient and their families who truly have to live with the consequences of any treatment they undergo. Patients need good information in order to know what treatments are right for them. This is why I believe the most important job a physician has is to fully educate their patients.

There is a great deal of information in this document. My goal is to provide you with the best service possible. The more you learn from me, the more likely I will reach that goal. Hopefully this document can increase the quality and effectiveness of my service to you.

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Chapter I

Criteria for Elective, Surgical Intervention

When is surgery the right choice?

Surgery should always be a last resort. Surgical interventions are permanent, and they never leave the body in better condition than what nature had provided initially. Indeed, surgery hurts the body in order to help a specific problem. Surgery does not reverse the aging process, nor can it stop it.

The following are criteria I recommend for all patients to help guide them in deciding when surgery is the right answer. These are the same criteria I use for myself and for my own family. An explanation of each one follows.

- 1) **Lifestyle-Limiting**
- 2) **Tried Everything**
- 3) **Clear Target**

Lifestyle-Limiting

Are these problems bad enough to consider surgery? Do they limit your life?

Lifestyle-limiting is a description of how significant the problem(s) a person is experiencing has become. Lifestyle-limiting means the problem(s) is severe enough to keep a person from doing the things in his or her life that are of most importance to them. This is not something for a surgeon to determine. How limiting or how severe a problem has become can only be determined by the person experiencing the problem(s). For example, consider the following true stories from my clinic.

One day I saw a patient who was in her 60's. She said, "Doc, I can't ride my horses anymore. My family and I have ridden about once a month for many years. Now, whenever I ride, I am left with such severe back and leg pain that for 2-3 days afterwards, I can't even get out of bed."

I asked her about what other activities she enjoyed. She answered, "My husband is retired but we both stay very active. We have a motor home and love to travel. I love gardening, spending time with my grandchildren, cooking, going to church and going for walks every evening." I asked how many of those other activities can she still do if she doesn't ride her horses. She confirmed, "I can do them all if I avoid riding the horses."

Now compare that with this story. Three months later, a woman in her 60's came to me with the same problem. She said, "Doc, I have horrible back pain whenever I ride my horses. It often shoots down my leg for days at a time." I asked her to describe the things she likes to do in her life. She answered, "Well, I am single and have never been married. I have no children or grandchildren. I travel the country riding horses in shows where I have them doing tricks. I also ride them in many other types of competitions. All of my friends are in horse associations and we meet up nearly every weekend at different shows or competitions. My whole life revolves around riding my horses."

Obviously, what is considered lifestyle-limiting is different to everyone. It could be simply an inability to work due to hand weakness, or it could mean having to rely on pain pills in order to perform normal daily activities. It might be pain so severe nothing seems to work well enough. It may be that painful flare-ups, while not often unresponsive to treatments, are occurring so frequently that only a few days each month can be described as pain free. My

job is to help patients any way I can, without surgery whenever possible, so that they no longer feel their problem(s) is limiting their life. If this can be done, then surgery is not indicated. If not, then criterion number one has been met.

Tried Everything

The second criterion that needs to be met before one should consider surgery involves learning all the reasonable, non-permanent options available which have been shown to help many people. By learning the options, how they work and how to use them, one is often able to improve enough so that their concern(s) is no longer described as lifestyle-limiting. If this can be done, surgery is not the right answer. If not, then surgery may be a good option. The bulk of this document focuses primarily on learning the reasonable options which do exist, how they work, and how to use them. No one ever would want to have surgery, not improve or even get worse (which is always a possibility, although hopefully a very unlikely possibility,) and then look back and wonder if something else, not tried, might have worked. Surgery is a permanent change to the body. It cannot be undone. And remember, it's not the surgeon who has to live with the results, it is you. You want the assurance of knowing that nothing else worked before deciding on surgery.

Clear Target

If a person has tried everything, and if their problem(s) is still considered by them to be lifestyle-limiting, then the only thing left is to define what is meant by having a clear target. Defining a clear target involves many things. First, what is causing the

problem? Why is it doing so? How can surgery address the problem? How many different ways can the surgery be done? What are the strengths and weaknesses of doing different surgeries to address the same problem? How do other surgeons do it? What other methods are being investigated? How was it done in the past? What is the most frequent method used today? What kinds of complications are known to be common with a given surgery? What is a given surgeon's infection rate? Does the surgeon have any financial disclosures? Does he or she benefit financially by using specific hardware, by performing surgery at a given hospital, or by sending you to a specific imaging center? (i.e.-MRI centers) All of these issues need to be well known before deciding to allow someone to change your body permanently. Doctors should have absolutely nothing to hide. Most will appreciate your concerns, and all would be asking the same questions if they were the patient.

Chapter II

Treatment Options and Preventative Measures

While keeping the surgical criteria in mind, the goal for the rest of this document is to describe the reasonable options that exist to treat neck and back pain. What can be done to get a person back into living life without lifestyle-limiting pain? What is “Tried everything?” A good metaphor I like to use to help describe how to use non-surgical options is to think of each option as a cup of water with the goal of putting out a fire. If one cup of water at a time is poured on a fire, it may never go out. If however, multiple cups are first poured into a bucket, and then all dumped on the fire at the same time, then the fire may be extinguished.

I like to separate treatment options and preventative measures into three major categories: Long-term, intermediate and short-term treatment options and preventative measures.

Long-term Preventative Measures

The Big 4

These are things which have been identified by epidemiological studies to be associated with an increased incidence of back and neck problems. In other words, what things increase the chances of having neck and back problems as a person ages?

- 1) Smoking – Smoking doesn’t cause everything bad that happens to the body, but if you compare 100 smokers with 100 non-smokers at random, at the age of 60, more people with neck and back problems will be found in the group who smoke than in the group who do not. There are always exceptions. Just like there are some people who are killed in accidents because they were wearing a seatbelt, there are also those who were saved by not wearing their seat belt. Still, if

100 people who were in an accident while wearing a seat belt are compared with 100 who were not, you will clearly find less injuries and fatalities in the group who were wearing their seat belts.

2) Diabetes – This is a disorder of glucose metabolism (blood sugar control.) If you have it, you have it. It is essentially not curable, although weight loss, exercise and diet can virtually eliminate the disease in some people. Most believe proper treatment can delay the effects of the disease and this would include it's affects on our aging spines.

3) Weight* – This is one of only two things discussed in this document that applies to the lower back, but not really to the neck. Otherwise, every aspect covered here applies to both the neck and to the lower back. Our heads all weigh roughly the same. However, the back bones of a person who weighs 80 pounds are virtually the exact same size as those of a 600 pound person. Over time, physical stress from increased weight can lead to a greater chance of having problems with low back pain. In some patients where, over 100 pounds could be lost, this type of weight loss can be much more effective in treating low back pain than any spine surgery. Of course losing significant weight is one of the most difficult things to do, especially when a person is already limited by neck or back pain. Pain makes it difficult to stay active with exercise. If activity is lost, weight is gained. With increased weight often comes increased pain. It is a difficult cycle to break. Sometimes, when appropriate, undergoing weight-loss surgery can not only make a huge difference in a person's back problems, but it can also help many other medical

problems. Conditions such as diabetes, other joint problems such as those which cause knee or hip pain, leg swelling and even heart disease can all improve a great deal with significant weight loss.

4) Lifestyle - The last long-term risk factor for degenerative neck and back problems is what I call lifestyle. There are many jobs, daily activities, hobbies and even exercise methods which are known to be hard on the spine. These include activities such as jogging, horse-back riding, gardening, working manual labor jobs, truck-driving, mowing the lawn, helping people move, nursing, and numerous other activities which involve weight bearing or lifting activities. Also, anything done for prolonged periods of time with forced, stagnant posture can aggravate neck and back pain. These types of lifestyle activities can lead to small strains, sprains, wear and tear that can add up over years creating a susceptibility to hastened degenerative changes in our spines. While it is often not possible to change some things in our lives, each of us could benefit from paying attention to the things we do that are hard on our necks and back, and by changing the amount or the manner in which we do these aggravating activities. Our spines were not designed to last 80 years. Up until the 1900's, the average life span for a human was only about 30 years. For tens of thousands of years our spines had only to last about 30 years or so on average. Now we live into our 70's and 80's, and as a result, diseases such as Alzheimer's, Parkinson's and Degenerative Spine Disease which were not well known by past civilizations, are now very prominent problems.

So the big 4 are:

- 1)Smoking
- 2)Diabetes
- 3)Weight*
- 4)Lifestyle.

Next up are intermediate-term treatment options and preventative measures. These are things which primarily help reduce the frequency of “flair-ups,” or help prevent new problems as well.

Intermediate-term Treatment Options/Preventative Measures

Physical Therapy (PT) & Neuromuscular Stimulation

Physical Therapy

There are different reasons physical therapy can be helpful for certain patients. For neck and back pain however, especially when discussing these within the scope of this intermediate category, going to out-patient physical therapy for a short time can help a person learn stretching and conditioning exercises that can be done at home on a daily basis. Physical therapy is not always a good idea when pain is severe. Rather, patients should often wait until their symptoms have eased up a bit. If a person goes to physical therapy and stretches his or her neck when they are already hurting, this may very well make him or her feel worse. However, assuming symptoms regress after initiating many of the short-term treatment options to be discussed further in this document, then it

is during these periods of relief when the benefits of physical therapy may best be seen. As our body ages it loses much of the flexibility that we enjoyed at younger ages. Learning techniques taught during physical therapy sessions can show a person how to stretch and warm-up their neck or back each morning and before any strenuous activities. Getting in the habit of stretching can help restore the flexibility of youth and thereby help prevent injuries. This is not unlike a professional athlete stretching before a game to help prevent muscle strains or other activity-related injuries.

Neuromuscular Stimulation

Neuromuscular stimulation can be achieved through relatively new devices often called neuromuscular stimulators. While there are many electronic devices on the market, most fit appropriately into the short-term treatment list of options and are not preventative in nature. Neuromuscular stimulators however, when properly programmed, will not only provide currents for pain relief as TENS units or other gadgets which tingle may, but they also cause muscles to contract. They will hold muscles in a contracted state for a few seconds, and then the contraction will be released. This cycle of contraction and relaxation will continue for 40-50 minutes with most programs used by the devices. Doing this type of treatment once daily (or twice a day, every other day,) for 30-60 days in a row can very slowly condition and strengthen neck or lower back muscles. This can, over time, create more support for the aging spine and this can result in fewer injuries. Conditioned muscles have increased endurance, and increased endurance reduces muscle fatigue, pain and spasm. While these devices will never be better than overall activity as we age, they can potentially

help decrease the intensity and the frequency with which flair-ups of back and neck pain can occur.

Short-Term Treatment Options

Short-term treatments will now be discussed. These are options that can be used to help treat acute flair-ups of back and neck pain. I like to use a metaphor to help describe how the proper use of these options can be more effective if used in combination with other options, rather than being used in isolation. When trying to put out a campfire (the “pain fire,”) small cups of water are not always very effective if one is placed on the fire, following that with another only after seeing it wasn’t enough. By first placing these same cups in a bucket, adding multiple cups to this bucket first, and then dumping the entire bucket on the fire, this method would likely be much more likely to put that fire out. Using these treatment options in isolation will unlikely ever prove as effective as using several in conjunction with one another.

While these options should help everyone overall, if the frequency or severity of problems remain life-style limiting despite trying the bulk of these options, then that is when the first two criteria for surgery are properly met. Remember, only you can decide when you feel you have tried everything and when your problem is life-style limiting. Trying these options is not to be done to satisfy your doctor. It is for your peace of mind. You need to know you have tried everything you consider to be reasonable before considering surgery.

I – Anti-Inflammatory Medications

The Aspirin Relatives

There are essentially only two kinds of pain medications in this world; these are aspirin relatives, abbreviated NSAID's (Non Steroidal Anti Inflammatory Drugs,) and morphine relatives (also known as opioid analgesics.) These two kinds of pain medications work in very different ways. NSAID's do not work for severe pain. If you are only offered ibuprofen after a spine surgery, the surgeon who did this would likely lose his or her license. While NSAID's do often take minor aches and pains away an hour or so after taking them, they are most effective in reducing pain in a gradual way. Taking these medications on a regular basis (as often as is allowed or considered safe) for weeks in a row, without missing any doses, this builds the anti-inflammatory effect gradually, but effectively. Over time consistent NSAID use can lead to considerable relief. Whenever a flair-up of neck or back pain is sensed, NSAID therapy should be started right away and continued for several weeks until at least a week or so is had without pain. Most people do not understand how best to use anti-inflammatory medications. Remember, taking NSAID's is only one cup of water for the fire. I often hear from patients that they used to take ibuprofen for their pain, but the pain worsened and it is no longer strong enough so they had to take a pain pill instead. I quickly ask them, "Yes, but do you still take the ibuprofen?" No matter how many other things are needed to treat a flair-up, NSAID's should always be taken on a regular basis in the background as well. However...

The only catch to taking NSAID's is that some of us cannot do so. Some people are allergic to them, some have bad stomach

problems with acid or ulcers and therefore they cannot take these medications. Consult with your primary care physician to see whether NSAID's are safe for you. I usually prescribe naproxen, which is the generic name for Aleve or Naprosyn. There is no magic to this one, ibuprofen works just as well. Naproxen only needs to be taken twice a day however, unlike some NSAID's that are dosed 3 or 4 times a day. There are also once-a-day NSAID's, but most require a doctor's prescription and none have been proven any more effective than their over-the-counter cousins. If you find yourself on vacation or elsewhere when a flair-up begins, naproxen is available almost anywhere and without a prescription (as are most NSAID's.) Always follow labeling instructions and consult your primary care physician with any concerns about taking NSAID's of any kind. Remember, any medication can be dangerous, including NSAID's. Some examples of NSAID's include ibuprofen (Motrin or Advil,) naproxen (Naprosyn or Aleve,) aspirin (Bayer or Anacin,) Mobic, ketoprofen (Orudis K,) Celebrex and others.

II – Muscle Fatigue/Spasm and the Pain

Much of the time, at least 50% of neck and/or back pain is being produced not by the underlying spine problem, but rather by the muscles' reaction to the spine problem. Whenever a problem in the spine begins to generate pain, our muscles react to that pain in many different ways. The main job of our neck and back muscles is to allow us to walk, stand and sit in an upright position. When a person is lying down, the neck and back muscles are at rest. When sitting or standing, the neck and back muscles have to work continuously. When we move around, each movement

requires some muscles to work while others relax or rest. This rotation of work and rest gives muscles a break from the non-stop work they have to perform when we are upright and still. In the lower back, walking is easier on the muscles than is sitting or standing still. The muscles of the lower back will get a very short break with each step taken and this adds up to more time at rest. Similarly in the neck, sitting at a computer or reading a book are examples of activities which are constant in nature and allow for very little rest time for the muscles. Small movements provide the neck muscles with small rest periods which add up and protect them from fatigue. Activities such as leaning forward for long periods of time or working above shoulder level are examples of additional stresses on neck muscles which lead to more fatigue. In the lower back, lifting or bending over for long periods of time are examples of activities which lead to more problems with muscle pain and fatigue.

Whenever a problem with the joint systems of the spine develops, it often leads to small losses in the structural integrity of the spine. This makes the job of the supporting muscles all the more difficult. This is how spine problems so often lead to pain dominated by muscle inflammation, fatigue and spasm. Muscles will often flinch in reaction to pain, and as the day progresses fatigue will set in causing pain, which is often described as burning or stabbing in nature. In the neck, the muscles attach across the back of the skull, run down to the area between your shoulder blades, and they also run across to the far portions of the shoulders as well. Pain can be generated anywhere along these areas, regardless of from where the problem inside the spine may be coming. In the lower back, the muscles attach across your pelvis bone at the lowest portion of your back. This is often where the majority of pain is felt with spine problems. Treating the pain that

is often generated by the muscles can often lead to significant relief. This can help a person avoid the use of chemicals such as pain pills, or other invasive treatments while waiting for a “flare-up” to calm down.

Muscle Relaxants

Many reasonable options exist to help treat muscle pain, fatigue and spasm. Muscle relaxants are medications which can be used to “take the edge off of the pain.” While they are not pain medications directly, most are not habit-forming and have relatively low side effect profiles. Soma is the brand-name of a muscle relaxant which I encourage people to avoid using. It has been my experience, and the experience of many physicians, that Soma tends to be very habit-forming. There are many muscle relaxants on the market other than Soma. Just as some people find relief from Tylenol, or Advil, or Excedrin, or Aleve for their headaches, many people react differently to each of the different muscle relaxants as well. While one may work well for one person, it may not for another. If a muscle relaxant can be taken and enough relief can be found to avoid taking a “pain pill,” then your pain is truly being treated in a safer way. I recommend trying a muscle relaxant on a weekend to judge its effects in a somewhat relaxed environment. If found to be helpful, then using a muscle relaxant in moderation can serve as another cup of water for putting out the fire. Unlike NSAID’s, however, regular use of muscle relaxants is not necessary as they do not affect the problem of inflammation, they simply help make the pain somewhat more tolerable. Muscle relaxants should only be used on an as-needed basis. Some examples of muscle relaxants include Robaxin, Skelaxin, Norflex and Flexeril.

Heat

Heat is a very good, natural muscle relaxant. While cold can be used to treat pain (see below) muscles are soothed by heat. Heat and cold application to the skin results in very shallow effects only. Temperature changes generated at the skin's surface cannot penetrate far enough to reach the spine. Indeed the peak effects happen close to the skin. The muscles are a layer between the spine and the skin. Heat attracts blood flow to the area which helps by bringing nutrients and oxygen to the muscles, and by removing waste products produced by fatiguing muscles. Heat can be a very good, safe cup of water for putting out the “back or neck pain fire,” especially when added to other cups of water.

Massage

It is easy to understand why massage can help sooth muscles. Finding a way of getting frequent massages can be a challenge, as can affording frequent massages whenever the services of a paid massage therapist are used. Finding a good massage therapist can lead to excellent pain relief, especially when added to other treatment options. (more than one cup of water on the fire at a time)

Acupuncture, electrical stimulation devices, various pain or arthritis creams and cold therapy

These options are safe, non-permanent and they have been shown to be very effective in treating pain. If you find one does not work for you, simply don't use it again. These options work in

similar ways, and they can be of excellent benefit especially when used with other cups of water. These options help by calming down the nerve signals. If a specific nerve ending begins receiving a pain signal from inflammation, it will send that pain signal to the brain, but it will also send a signal to the other nerves in the area. This causes those nerves in the area, which are not receiving a pain signal, to calm down or to decrease their activity. In this way, the pain message going to the brain from a given nerve is thereby relatively amplified. The brain will see less interference from surrounding nerve endings. The treatment options in this section stimulate multiple nerve endings in a given area, and this helps by causing these nerves to calm each other down.

Electrical Stimulation Devices

There are many types of electrical devices on the market aimed at treating pain. Two of the more common ones are known as TENS units and interferential current providing devices (IFC devices)/muscle stimulators. TENS (transcutaneous electric nerve stimulator) units send a current into the superficial layers of the skin and create a buzzing sensation. IFC devices, often called muscle stimulators (not to be confused with neuromuscular stimulators discussed above), send a current called interferential current in a similar fashion as the TENS units but overall with a deeper penetration, perhaps reaching more nerve endings. Neuromuscular stimulators often include these two basic kinds of stimulating current programs as well, but they also go one step further in that they cause the muscles to physically move. This is what separates neuromuscular stimulators from TENS units or IFC producing devices. Even though TENS units and IFC producing devices are not in the intermediate category of treatment options

and preventative measures, they are often still very useful as a non-invasive, non-permanent and safe method of treating pain. They, too, are very effective cups of water to add to our bucket. Electrical devices are not an option for patients with pace makers or other internal heart devices. It is recommended that you ask your physician about the safety of such devices before considering their usage.

Chiropractics

Not recommended for the neck
An excellent option for the lower back

There is one major difference between the neck and the lower back which limits my ability to recommend chiropractics for patients with neck pain. The anatomy of the neck is best described as much more delicate than that of the lower back. Critical structures for survival such as the spinal cord, the junction of the spinal cord with the brain stem, and the vertebral arteries which combine to form the entire blood supply for the brain stem, all of these are located in the cervical spine and are not present in the lower back. Because of the presence of such important structures, I cannot recommend manual manipulations of the neck in any manner more aggressive than that used for a good massage. Admittedly I am ignorant of chiropractic techniques, and I do clearly recognize that many people find good help from chiropractic treatments. However, although rare, I have seen patients with serious injuries that may have been associated with chiropractic techniques. I am also quite sure chiropractors too have seen people seriously injured after spine surgeries as well. The comments on chiropractics in this document are not meant to

criticize chiropractors, nor chiropractic techniques. However, while I would not recommend that a patient stop going to a chiropractor if they feel comfortable and feel they benefit from such treatments, still I cannot recommend initiating such treatments for the neck. The safety of such a broad recommendation is unclear when such treatments could potentially lead to harmful, manual manipulations to very delicate anatomy.

Chiropractic treatments for the lower back have clearly been shown to help a large number of people. There are no structures in the lower spine as delicate or as vital to survival as are found in the neck. Chiropractors can be extremely effective at deep manipulations which can lead to significant pain relief for many patients. Chiropractic treatments are very appropriate options that should be tried before opting for surgical intervention. If you find chiropractics not helpful, simply don't go back. Chiropractic treatments are not permanent changes as surgical ones are.

III – Pain Pills

As mentioned previously, there are essentially only two kinds of pain medications. These are aspirin and morphine. Virtually every pain medication is a relative of either aspirin or morphine. Aspirin relatives are not sufficient to treat serious pain. Pain pills (the morphine relatives) do work for severe pain, and they do so very effectively. Unfortunately, there are serious risks involved with the use of morphine relatives. It is very important for anyone having to take these medications to understand the dangers involved with doing so. These medicines work, but only for a few hours and then another dose is needed. They don't fix the

problem, they just hide it. This is one of the dangers of using them. If your neck or back is hurting you, especially when you are doing things which are aggravating or enhancing that pain, your body is essentially telling you to stop what you are doing and rest. If you take a pain pill, you can continue this aggravating activity. This can make the problem even worse.

Another way in which using pain pills can become dangerous involves long-term usage. Long-term usage causes the body to become tolerant to their effects. This means that while three pills a day might have been plenty at one point, a few months later it may require 20 pills to achieve the same relief, even if no worsening of any kind has actually developed in the amount of pain being generated. In this scenario, it would then be the case that this patient would now need 18 or 19 pills in order to satisfy the body's dependency on these pills, and it might then take 4 or 5 more in order to achieve any relief again. There is no endpoint to using pain pills on a long-term basis. Also, if that same patient does not get 18 or 19 pills on a given day, often they experience much more pain than they would if they had never taken these pills in the first place. Often there will also be pain from areas that usually never hurt before whenever the body's dependency is not met. If this continues, eventually a new problem, far more difficult to treat develops. Addiction is a SEVERE problem, affecting many social, emotional and economical areas of ones life. Problems with addiction will also greatly affect the lives of others, such as friends or family members of patients suffering from an addiction. It is far more difficult to help a patient cure the problem of an addiction than it is to perform any spine or brain surgery. It takes a multidisciplinary approach, with an enormous amount of supportive resources, which are very difficult to find, to help cure an addiction. If anyone creates a pill that will cure addictions, they

will win the Nobel Prize and likely become a retired billionaire. The same thing would happen if anyone ever creates a morphine type pain pill that does not cause tolerance. Hopefully these things will be found some day.

Pain pills are very good medicines however, and they have to be on any list of options aimed at treating pain. They just must be used carefully, and they should never take the place of using other pain treatment options listed in this document. They are best used only when absolutely necessary, never in isolation from other treatment options, and hopefully only for short periods of time (preferably days or perhaps weeks at a time). If a person is not able to do those things they designate as important to them in their lives without continued use of pain pills, then that person's problem is lifestyle-limiting.

Many pain pills are combo drugs. This means they have an aspirin relative such as Tylenol combined in the same tablet with a morphine relative. Examples of commonly used pain pills include the brand names Norco, Lortab, Percocet, Darvocet, Vicoprofen, Vicodin, and Tylenol with codeine.

IV – Steroid Injections

Steroid injections do the same thing as aspirin relatives do, they shrink inflammation. They are far more potent than NSAID's, however, and with few exceptions a steroid injection should always be tried before resulting to surgical interventions. Steroid injections are a very big cup of water. It is not common to find a patient with back or neck problems who does not see significant relief following an epidural steroid injection. They are a "big gun."

The word steroid refers to one of the two categories of hormones made naturally by our bodies. While there are many different kinds of steroid hormones, the one used to treat inflammation is a form of one called cortisol. Cortisol is made by the adrenal gland, an organ that sits atop of each of the kidneys. It is a “stress hormone.” It is released by the body during times of physical stress such as during periods of starvation. Cortisol works by breaking down our body, our muscles, our tendons, our bones etc., all in order to mobilize sugar and energy needed by the body in order to deal with whatever physical stress it is encountering. Long-term use of this hormone as a medication leads to weakened bones, weakened muscles, ligaments, tendons and other deteriorious effects out of the scope of this document.

While one or two steroid injections are relatively safe for most patients and should be tried prior to resulting in surgery, multiple injections are rarely a good idea. If a person gets a full year relief from a steroid injection, it should definitely be repeated if needed. If however, only a few weeks or months of relief are experienced, then repeated injections can become a bad idea.

There are many other interventions that are currently performed, primarily by pain specialists or interventional radiologists, which for select patients can be very effective and helpful. Overall, however, these options are still just like cups of water. The relief a person can expect from interventional techniques cannot be expected to work as well if they are relied upon in isolation from other options listed in this document. A good example for this thought comes from a patient I had who came to me in follow-up 4 weeks after a very effective steroid injection. She stated that for the first 3 weeks following the injection she felt like a new woman. She began jogging again, played basketball and rode her horses again, all without any pain.

Unfortunately, the pain returned. The problem was that basketball, jogging and horse riding are all activities which generated a great deal of stress on our spines. A fire is not easy to put out if the coals are kicked after water is applied. This analogy brings us to our final category of short-term treatment options for neck and back pain...rest.

V – Rest

None of the options listed above, whether done individually or in combination with others, are likely to be very effective if activities which are aggravating to our neck or back are not avoided, at least temporarily. Rest is a category which primarily includes avoiding anything in our lives which may be aggravating to the joint systems in our neck or back. This does not just mean avoiding jogging, lifting, gardening, or any other stressful physical activities. It also means avoiding sitting without a break for long periods of time, raising the level of ones computer to eye level so as to avoid static neck flexion, avoiding mowing the lawn, doing dishes, running a vacuum or any other normal daily activities which require heavy use of our neck or back muscles. Rest is an important category, a cup of water that should always be added to the bucket. It is a helpful option that is not a chemical, not expensive, not permanent and carries with it virtually no risks.

Rest should not be achieved at the cost of decreased activity. Walking is always encouraged, as are non-weight bearing exercises. While the best form of exercise is the one that we can get ourselves to do on a regular basis, the second best ones are any which are considered non-weight bearing. Examples of these include any exercise performed in a pool, ellipticals and bicycles.

In summary, many options exist that can help patients with neck or back pain. There is no magic pill out there, no way to stop or reverse aging. When used properly and in combination with others, these options often provide significant relief, even in people who ultimately require surgery. When the list of reasonable options has been exhausted to the satisfaction of the patient, and symptoms are still frequent enough or severe enough to be considered life-style limiting, then surgery can be a very good treatment.