



Neck Pain:

A Self-Help Guide to Get You Moving and Feeling Better

Hershey Orthopedic & Spine Rehab www.hersheyrehab.com

Hershey and Lancaster

Neck Pain & Stiffness Self-Help Guide

Introduction and Reasons for Neck Pain & Stiffness

Next to back pain, neck pain & stiffness is the one of the most common problems for us in the U.S., and one of the most common reasons we see people here in the clinic for treatment. There are many reasons we develop this – the vast majority of reasons relate to repetitive stresses that are put on our bodies, just by the nature of the everyday activities we perform. Our everyday lives are actually NOT very easy on our neck.

Believe it or not, any and all of the following can cause us to have neck pain: computer work, phone use, typing and/or texting, driving, reading, studying, or various other activities, sports, or hobbies. And Yes – you can strain or get a kink in your neck from doing something like lifting, turning, or twisting awkwardly. If it gets bad enough, pain or tingling/ numbness can even result, often into the shoulder region or down the arm. (In that case, we do recommend strongly seeing someone like your physical therapist or doctor, as that can often indicate a more advanced problem, and requires professional help.)

But it's usually not the activity itself, but the POSITIONS we end up in while we're doing those activities, that cause the problem. And the vast majority of these problems do not develop overnight – it takes a lot of repetition and repeated stresses for pain and stiffness to develop. *Our bodies are actually very resilient*, and it takes a lot to break them down to the point where we begin to experience neck pain. When we're speaking with patients as they're beginning treatment with us, they often say that the things that hurt them now, at one time did not.

Later on in our guide here, we give advice and strategies for you to try in the hopes that it helps relieve your pain or stiffness. What we can tell you is that the tips we give here have been shown in research, and in our 20+ years of experience, to be the best things that help the vast majority of people with neck issues. We cannot, however, guarantee that what you try from reading this will help you 100%. It usually takes a personal assessment and combination of things, which are unique to each person, to fully fix the issue.

I Have Neck Stiffness or Pain – Now What Can I Do To Help or Fix It?

Despite how common neck pain is, and how bad it can feel, the numbers are GREATLY in your favor that you can get rid of it and recover fully. And if you are limited now in what you are able to do because of that pain, odds are VERY GOOD that you'll get back to 100% and back to doing what you enjoy doing, even if the pain is going down your arm.

In order for that to happen and to fix your neck pain (as in fixing any problem), there are some things that need to happen.

- 1) You need to FIGURE OUT THE CAUSE or WHAT'S CONTRIBUTING to the pain. By this we mean – things we're doing that aren't great for our neck. Somewhere shortly before or around the time our neck started hurting, there's often been some sort of change in the activities we do or positions we're in. Usually, we started something new, started doing something in new / different ways, or increased how frequently we were

doing something. Or for some, we've been doing the same thing over and over for a very long time (a lot of repetition). Now for some of us this is fairly easy to figure out, and for others of us it's not.

- 2) Next - You need to modify or change whatever daily activities or habits you can, so that the factors that are contributing to your pain are minimized or eliminated. This can be different for everyone. Examples would be: getting up from your desk every 20-25 minutes at work, even if only for a few seconds or minutes, so that you're not sitting continuously for hours on end, re-arranging your computer and desk chair so that you are naturally in a better position/posture, or adjusting how you lift or improving your sport techniques.
- 3) Sometimes, simply making some changes is enough to greatly improve our pain, and maybe it even goes away. Sometimes, though, it helps a - but it's not enough.

In order to get a longer lasting or permanent result, most people greatly benefit from a couple of other things. One, is some form of treatment to improve mobility and range of motion in the neck. And second, is some form of exercise to address any tightness that often develops, as well as weakness of muscle groups that are often seen. The causes of the tightness and weakness that develop in our neck are, most often, the cumulative effects on our body of the positions we get into with daily activity, work, hobbies, or sport. Especially if we're not doing much to counteract these effects (i.e. exercise, practicing good posture/position during activity as much as is realistic, etc.).

This is where getting some professional help often makes sense – and high quality, “hands-on” Physical Therapy can be a great option. Later in the book we'll go over what approach tends to help most people the greatest, and why that is. We will also show some common exercises that are very helpful for most people. CAUTION – depending on what your problem is and other factors, some of those exercises may not be appropriate for you. So, if a particular exercise doesn't feel right or is painful, it's always advisable to consult with your physical therapist (if you have one), or doctor, for guidance.

NECK PAIN DIAGNOSES

As we mentioned earlier, the main causes of neck pain are:

- strains and muscle-pulls or “kinks” in the neck, which are less frequent, and
- repetitive stress and strain from positions we get into and activities we do – which are the most frequent.

But next we're going to go over what your family doctor or specialist, such as an orthopedist, may diagnose you with if you go to see them for your neck pain. Below is a picture illustrating some of the most common diagnoses.

ARTHRITIS (also called Spondylosis)

Most neck problems happen after years of wear and tear on the parts of the cervical spine, such as joints, cartilage, and muscles. At first, these small injuries are not painful. But over time they can add up. Eventually they begin to cause inflammation and neck pain.

Doctors sometimes call these degenerative changes in the spine spondylosis.

Spondylosis can affect the bones and soft tissues of the spine. However, it is important to know that most problems with spondylosis are a normal part of aging.



DEGENERATIVE DISC DISEASE and STENOSIS

The normal aging process involves changes within the intervertebral discs. Repeated stresses and strains weaken the connective tissues that make up a disc. Over time, the nucleus in the center of the disc dries out. When this happens, it loses some of its ability to absorb shock. The outer parts of the disc (called the annulus) also weakens and develops small cracks and tears.

Often these changes are not painful. But larger tears that reach to the outer edge of the annulus can cause neck pain. The body tries to heal the cracks with scar tissue. But scar tissue is not as strong as the tissue it replaces. At some point the disc may finally lose its ability to absorb shock for the spine. Then forces from gravity and daily activities can take even more of a toll on the disc and other structures of the spine.

As the disc continues to degenerate, the space between the vertebrae becomes smaller, and the openings where the nerves come out shrink (this is STENOSIS). This compresses the facet joints along the back of the spinal column. As these joints are forced together, extra pressure builds on the articular cartilage on the surface of the facet joints. This extra pressure can damage the facet joints. Over time, this may lead to arthritis in the facet joints.

These degenerative changes in the disc, facet joints, and ligaments cause the spinal segment to become loose and unstable. The extra movement causes even more wear and tear on the spine. As a result, more and larger tears occur in the annulus.

The nucleus may push through the weakened and torn annulus and into the spinal canal. This is called a herniated or ruptured disc. The disc material that squeezes out can

press against the spinal nerves. The disc also emits enzymes and chemicals that produce inflammation. The combination of pressure on the nerves and inflammation caused by the chemicals released from the disc cause pain.

As the degeneration continues, bone spurs develop around the facet joints and around the disc. No one knows exactly why these bone spurs develop. Most doctors think that bone spurs are the body's attempt to stop the extra motion between the spinal segment. These bone spurs can cause problems by pressing on the nerves of the spine where they pass through the neural foramina. This pressure around the irritated nerve roots can cause pain, numbness, and weakness in the neck, arms, and hands.

MUSCLE STRAIN

People with neck pain or stiffness are often told they have a muscle strain. However, unless there was a severe injury to the neck, the muscles probably haven't been pulled or injured. Instead, the problem may be coming from irritation or injury in other spine tissues, such as the disc or ligaments. When this happens, the neck muscles may go into spasm to help support and protect the sore area.

MECHANICAL NECK PAIN

Mechanical neck pain is caused by wear and tear on the parts of the neck. It is similar in nature to a machine that begins to wear out. Mechanical pain usually starts from degenerative changes in the disc. As the disc starts to collapse, the space between the vertebrae narrows, and the facet joints may become inflamed. The pain is usually chronic. (Chronic pain builds over time and is long-lasting.) The pain is typically felt in the neck, but it may spread from the neck into the upper back or to the outside of the shoulder. Mechanical neck pain usually doesn't cause weakness or numbness in the arm or hand, because the problem is not from pressure on the spinal nerves.

RADICULOPATHY (PINCHED NERVES)

Pressure or irritation in the nerves of the cervical spine can affect the nerves' electrical signals. The pressure or irritation can be felt as numbness on the skin, weakness in the muscles, or pain along the path of the nerve. Most people think of these symptoms as indications of a pinched nerve. Health care providers call this condition cervical radiculopathy.

Several conditions can cause radiculopathy. The most common are degeneration, disc herniation, and spinal instability.

Degeneration and Stenosis: As the spine ages, several changes occur in the bones and soft tissues. The disc loses its water content and begins to collapse, causing the space between the vertebrae to narrow. The added pressure may irritate and inflame the facet

joints, causing them to become enlarged. When this happens, the enlarged joints can press against the nerves going to the arm as they squeeze through the neural foramina. Degeneration can also cause bone spurs to develop. Bone spurs may put pressure on nerves and produce symptoms of cervical radiculopathy.

Herniated Disc: Heavy, repetitive bending, twisting, and lifting can place extra pressure on the shock-absorbing nucleus of the disc. If great enough, this increased pressure can injure the annulus (the tough, outer ring of the disc). If the annulus ruptures or tears, the material in the nucleus can squeeze out of the disc. This is called a herniation. Although daily activities may cause the nucleus to press against the annulus, the body is normally able to withstand these pressures. However, as the annulus ages, it tends to crack and tear. It is repaired with scar tissue. Over time, the annulus becomes weakened, and the disc can more easily herniate through the damaged annulus.

If the herniated disc material presses against a nerve root it can cause pain, numbness, and weakness in the area the nerve supplies. This condition is called cervical radiculopathy (mentioned earlier). And any time the herniated nucleus contacts tissues outside the damaged annulus, it releases chemicals that cause inflammation and pain. If the nucleus herniates completely through the annulus, it may squeeze against the spinal cord. This causes a condition that is even more serious because it affects all the nerves of the spinal cord. This condition is called cervical myelopathy.

Treatments For Neck Pain

A lot of people experience neck pain, and there are seemingly a lot of potential treatments out there. From conservative treatments such as Physical Therapy, to over the counter pills and prescription medications, to more invasive procedures like injections and even surgery.

Pills and medications have negative side-effects on our organs such as the liver and kidneys, intestines, etc. Because of that, many people want to avoid taking them if possible, which is understandable. It is one of our goals to help our clients so they don't have to take pills anymore, or can get off or stay off of them. If pain is severe enough, it can be appropriate to take something for pain or inflammation, but you want to get off of them as soon as is feasible.

Due to the invasive nature of surgery and injections, as well as their potential negative side-effects and less-than-certain outcomes, doctors almost unanimously recommend having multiple courses of other treatments first. And Physical Therapy has proven to be THE go-to option, for the reasons that: it has been shown to be VERY effective (in a lot of medical research), and two – it is safe, and often has SIDE-BENEFITS, not negative side-effects. Meaning, many people are not only back to their normal condition after they complete treatment, but BETTER than they were normally – more flexibility, more strength, they can do more, they have more energy, better performance in sport, etc.

Now, not every approach used in Physical Therapy is equally helpful. Research has shown that a particular approach is the most helpful for most people. What approach is that?

Recommended Approach in Physical Therapy (This is our approach, and we have fun along the way)

We take a three-part approach in our treatment for neck pain.

1. Manual Therapy

Manual therapy refers to a group of techniques where your physical therapist uses his/her hands to apply treatments to your body for the purposes of relieving pain, and maximizing your ability to move well. It is also referred to as “Hands-On” treatments. Examples of this include mobilization and manipulation of the spine and other joints, traction, as well as soft tissue techniques such as deep tissue massage, trigger point massage, release techniques, etc.

Using manual therapy speeds up recovery after an injury or surgery. Even if a problem has been there for years, it is very effective in relieving pain and improving range of motion, in most cases faster than just doing exercise alone.

We use manual therapy for virtually all of our clients, no matter what problem they come in for, because research evidence has shown it is so helpful and effective. What techniques we choose to do we base on what we learn from speaking with you and by examining you, what we think can best help you, what you like or don't like, and other important factors such as your age and other medical conditions you may have.

2. Exercise

As mentioned previously, exercise is almost always part of the solution in getting a LONG-TERM improvement and fixing neck pain. This is the case in almost every other condition we treat as well.

Exercise is so important because part of the reason that pain develops is due to a weakness or muscle imbalance of some sort, that ends of putting excess strain or pressure on parts of our neck. Exercise corrects this over time – and it's something that manual therapy, or even ice, heat, etc. can't fix. So, even if someone has manual therapy, which feels good and gets joints moving better, if they don't address any weakness or muscle imbalance they may have, the relief is almost always temporary, and the pain comes back. Combing the two (manual therapy and exercise), is vastly more effective than just one of them alone.

The exercises we use and recommended vary greatly depending on the person, their age, what they need, and what their goals are. Most times, simple exercises are often the most effective. We show some of the most helpful exercises later in the guide which you can refer to.

3. Changing Something (Change is Hard Sometimes, Right?)

This kind of goes back to what we mentioned in the beginning of this guide. The third part of getting LONG-TERM improvement is to make changes to our daily activities or

routine that relieve the repetitive stress or strain that we are putting on our neck. This is often very challenging at first, because we're trying to break old habits and make new ones – but the goal is that the changes that we make become permanent over time. And therefore – we feel better long-term.

Again, exactly what this look like in real life is different for everyone, but it often involves making changes to things like: how or where we sit when we're on the computer, watching TV, driving, or working; how we lift, etc. We provide some examples of good and bad positions at the end of the guide as well.

Conclusion

We hope you've found the information in our self-help guide informative, but most of all we hope it provides you with some relief if you're experiencing pain! In summary – if you're experiencing neck pain that doesn't seem too serious or severe, look over and try to incorporate some of the things we mention here in our guide. They can be very helpful.

If your pain is significant, or if you're getting radiating symptoms into your shoulder or arm, or if you've tried some of the tips and it's not getting better, then we would recommend seeking professional help.

If after reading our guide you still have questions about anything, please don't hesitate to contact us at either our Hershey or Lancaster offices, or by email. Our contact info is below. Here's to you hopefully moving and feeling better!

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EXERCISES FOR NECK PAIN

Click on the link next to each exercise to view a video demonstration.

Stretches: General guidelines are to hold each stretch for approximately 30 sec., and repeat 3-4x's. We generally recommend most people do these 1-2x's/day, but you can do them more often if they are helpful and feel good.

Strengthening: For strengthening (exercises 4 through 6), performing them every other day, or about 3x/week should be adequate for most. Give your muscles a day or two to recover from the work you did, then repeat. Some muscle soreness and stiffness is

normal and expected, particularly if we worked the muscles pretty good during the exercises.

1. [Upper Trap Stretch](#)
2. [Levator Stretch](#)
3. [Corner Stretch](#)
4. [Chin Tucks](#)
5. [Prone A's](#), [Prone T's](#), and [Prone Y's](#)
6. [Banded Rows](#)