



Knee Pain

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

Hershey Orthopedic & Spine Rehab

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Knee Pain Self-Help Guide

Introduction and Reasons For Knee Pain

Knee pain is quite common, and affects people of all ages and for various reasons. From younger children who may have something like Osgood-Schlatter's Disease (it's not really a disease, but a temporary condition due to rapid growth spurts), to people of various ages with pain around the kneecap (which is caused by many things), to those in their 50's and above who may have knee arthritis.

There are many different causes for knee pain, but these can be broken down into two main categories or types of knee problems. Knee pain can be caused by 1) Injury, and also by 2) Repetitive stress or strain over time. Arthritis falls into category #2 for sure – repeated stress.

Knee injury such as ligament tears, cartilage tears, and fractures, that occur from some sort of accident or trauma are not uncommon. But the most common knee pain conditions by far are caused by 2) Repetitive stress and strain. By this we mean that most people cannot recall a particular thing that brought on or “caused” their knee pain – but they have been doing *something*, and it just started one day, has been persistent, and all of a sudden really limits their ability to do things they really enjoy. It may even make some things we usually take for granted, like just walking or going up + down stairs, painful and very difficult.

We also often get asked – “why did my knee start hurting now? Because I used to be able to do things with no problem. But now I can't”. Again, there are definitely instances where someone injures their knee – they tear a ligament or cartilage, or have some sort of trauma, and the problem is pretty obvious. But the majority of knee pain issues are not caused by a definite injury. The vast majority of knee pain issues, *to include the pain from arthritis*, develop gradually over a long period of time, **and boil down to not WHAT we do exactly, but HOW we do it.**

Specifically – HOW WE MOVE our bodies, the position our legs and trunk are in when we walk, or squat, or get up from a chair, do our gardening, or go up + down stairs, or run, etc. While we are doing the various activities we do during our everyday lives, whether it be just normal everyday things, or hobbies that involve physical activity, or athletic pursuits – there are ways to move our legs that 1) put *very little* stress on the knees, and then there are ways to move that put 2) **A LOT** of stress on the knees. Our goal should be to move in ways that 1) put very little stress on the knees.

BUT – the vast majority of the people we work with who have knee issues do NOT have a good idea of how they move – or how they SHOULD be moving. And we're even talking about extremely talented athletes who compete at very high levels (even college and pro) – they do not know how they should be moving to avoid stress (and eventually potential injury) to their knees.

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

Obviously, a serious knee injury and/or surgery involves recovery time, rehab, and a return to activity that can seem very slow and take a long time. The body needs to heal and rehab before being ready to return to full activity or sports. Techniques and procedures have advanced over time and most people fully recover after something like this and get back to doing what they love.

When it comes to knee pain that develops over time, it can take some time and persistence, but despite how bad it can feel, the numbers are actually 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. We only mention this because many people we have worked with come in frustrated, thinking they'll never be able to do the things they enjoy again, because their knee has been bothering them for so long.

In order for that to happen and to get rid of your knee 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 are doing that aren't great for the knees. Somewhere around the time our knee started hurting, there's often been some sort of change in the activities we do. Usually, we started something new, started doing something in new / different ways, or increased how frequently we were doing something (it could be more or less frequent – either one could be bad). Or for some, we've been doing the same thing over and over for a very long time (a lot of repetition). And most likely we've been moving our legs in ways that put A LOT of stress on the knees, as we talked about earlier. Now for some of us this is fairly easy to figure out, and for others of us it's not. Partly because you most likely won't experience pain right away at that time. Easy examples of this would be taking up a recent hobby too quickly or vigorously, like daily walks, hiking, jogging, working out, or a sport like tennis, pickle ball, basketball, etc. It could be anything.

2) Next - You need to MODIFY OR CHANGE whatever daily activities or habits you can, so that the factors that are contributing to your knee pain are minimized or eliminated. This usually involves a period of rest from the specific activities that hurt the knees. This can last from a couple of days up to weeks depending on the person or the activity. By this we don't mean to do Nothing – just avoid the specific painful activity for the time being so your knee tissues have some time to calm down. Using some ice (apply for 10 minutes a couple of times per day) or heat (15 minutes at a time, a couple of times per day) can help with pain. Use ice if the knee pain just started within in the last couple of days. If it's been a longstanding or chronic problem, heat can be used. Both ice and heat are helpful – just depends on when you use them.

Then, in the meantime, we need to figure out WHY that activity is causing pain in the knee. This gets back to the point we made earlier about HOW we move the legs when we do the things we do.

There are usually a couple of different things that cause us to move “not well” or even poorly. One, there is usually some sort of limitation or deficit in one (or many) of the following aspects of our lower body and core: muscle strength, muscle flexibility, and joint range of motion (and not just the knee joints – it is extremely common that limitations at the spine, hips, and ankles are *main causes* in the development of knee pain). And Two, a lack of coordination or control of our bodies in moving well. Think of it in terms of trying to break bad habits, and learning to do things over again differently, like squat again, run again, or even walk correctly again. Believe it or not, it is extremely common to find what we call movement “faults” or “errors” in people, even people you would consider very fit, very active, athletic, etc. Most of us are unaware of these things for many reasons – it could be lack of experience, old habits, or just that we have busy lives and haven’t yet taken the time to really look at how we move – but now our knee is telling us “you better pay attention now”. Later on in the guide, we will show you some examples of good and bad movements as they pertain to the knee – basically, how you should move, and what to avoid.

3) Sometimes, simply making some changes to what we’re doing is enough to greatly improve our pain, and maybe it even goes away. Sometimes, though, it helps some - 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 exercise to improve mobility and range of motion of not only the knee, but possibly the spine, hips, and ankles as well. As we mentioned earlier, they all have a great effect on the amount of strain that ends up on the knees.

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 lower body are, most often, the cumulative effects 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. By hands-on we mean treatment techniques where the Physical Therapist uses his/her hands to help restore mobility, range of motion, and reduce and take away pain. Types of manual therapy can include massage, trigger point massage, mobilization and manipulation of joints, active release, etc. There are many different techniques, and we use all of them here to some degree, depending on the particular patient and their particular problems.

Next, we’re going to go over different treatments for knee pain, and 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, to include links to video instruction. 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.

Treatments For Knee Pain

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

The Ice vs. Heat Question: We mentioned this earlier and we get this a lot - here's what the latest research shows, and what our clinical experience shows. If your problem is acute (meaning it just started now or within the last 2 days), always use ice during those first couple of days. It will help with pain, and won't increase circulation and swelling. If you put heat on during those first couple of days, it will increase circulation (that's what heat does), and therefore swelling, and you will hurt more. Usually by day 3, you're good to start putting heat on. It can feel good, and after those first few days, you do want to start bringing more circulation into the area to help your tissues heal. Whenever you use ice, apply it for 10min., and heat for 15-20min.

Knee Sleeves and Braces: For those with arthritis, a knee sleeve or brace can be helpful in providing comfort because it will provide some compression to the joint. So it will give some support, as well as usually help keep swelling down if there is some present. So we recommend them sometimes - for our patients who have severe arthritis, they often say this helps them walk better and more comfortably in conjunction with their treatments in the clinic.

In cases of ligament or cartilage injury, specific braces may also be recommended to provide stability and support based on the specific type of injury to the knee.

Pills and Medications: 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. And more and more physicians are becoming more sensitive to this.

Injections and Surgeries: Injections to the knee are usually done to decrease swelling and pain that occur from injury. A steroid is used in these cases. Their effectiveness is extremely variable. They become less and less effective when they are used for chronic and longstanding knee pain from repetitive strain and arthritis. Patients often come to us with the goal of avoiding injections, and they are able to avoid them in most cases. We will say that the longer someone waits before getting help and addressing their issue, the more likely they are to get an injection.

In certain knee conditions such as serious ligament tears and large cartilage tears, surgery is often necessary to restore the function of the knee. However, in cases where someone has a ligament or cartilage injury that is not as severe, many people are able to heal and get back to full activity without surgery. It is in these cases where Physical Therapy also plays a huge role.

Whether you have general knee pain, or something more serious like a tear, 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 knee 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 knee and other joints, 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. 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 knee. 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 knees. This often involves changing how we stand, walk, sit, run, etc. 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.

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 knee 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've tried some of the tips and it's not getting better, then we would recommend seeking professional help from a physical therapist (we are here to help!). We can also help you decide if you should also see a physician such as your family doctor or an orthopedist if you are unsure what to do.

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 KNEE PAIN

STRETCHES: When doing the stretches, your goal is to get a comfortable/tolerable stretch and hold it for approximately 30 sec., and repeat 3x's. You can do these once/day or more if they help and feel good.

1. [Thigh Stretch on Stomach](#)
2. [Hip Stretch 1](#) (do this one if kneeling is not comfortable)
3. [Hip Stretch 2](#) (do this if kneeling is not a problem)
4. [Hip Stretch 3](#)
5. [Hamstring Stretch Options](#)
6. [Calf Stretches](#)

STRENGTHENING: Your goal when performing these is to perform 3 sets of 12-15 challenging repetitions. Rest about 1 minute between sets. Do these 2-3x's week (not every day), with 1-2 days rest between doing these. When first starting out, you may not be able to do as many as we're asking. That's ok. Just do what you can initially. It should feel like you worked your muscles a bit though. Just progress gradually as you feel you are able, with the goal of doing 3 sets of 12-15 repetitions. If that gets fairly easy, add a little weight to your ankle (you can wear a heavy shoe or a boot if you don't have weights).

1. [Straight Leg Raises](#)
2. [Side-Lying Leg Lifts](#)
3. [Leg Lifts on Stomach](#)
4. [Sit to Stand](#): Using a higher chair will make this easier, and a lower chair will make this harder. If unsure if you can do this well, start with a chair with a higher seat so that it is fairly easy, and progress week to week to a lower chair as you are able. Pay attention to HOW our subject moves in the video and attempt to mirror that, even if doing from a higher chair than shown here.
5. [Step-Ups](#): You can do this on as small of a step as needed to allow you to do it well, and progress to a normal height step as you are able (6-9 inches). Again, try to mirror how our subject is moving when you go up and down the step.

EXAMPLES: MOVEMENT HOW-TO's and DON'Ts

[Going up Stairs](#)

[Walking](#)

