

The Coccyx Revisited: External and Internal Exam Correction Procedures

By Marc Heller, DC

My first article on the coccyxⁱ, written back in 2004, changed my life and my practice. It was one of the first articles published on internal coccyx procedures. I did not invent the procedure; I just had the chutzpah (a Yiddish term for nerve) to write about it.

Since then, patients from all over the country have e-mailed me about how to get their coccyx corrected. Most of them have tried external chiropractic and PT approaches, and have nearly exhausted their medical options as well. (Coccyx removal surgery is tricky, and does not always work.) I usually have no idea where to send patients, as there is no list of who is competent at treating the coccyx, and no standardized training. www.Coccyx.orgⁱⁱ is a great site for more information on the coccyx, and for procedures that may help.

An aside on imaging. Coccyx.org has a great article on how to take dynamic x-rays of the coccyx. Regular x-rays may show angulation. MRI and CT scans may be helpful, but a simple standing and then sitting (dynamic) x-ray is usually the most useful imaging study. It will tell you if the coccyx is either hypermobile or luxated out of normal position. The key is the sitting x-ray, done with the patient reproducing their pain.

Correcting the coccyx can do more than help tailbone pain. Some patients have lower back pain, sciatica, headaches or dural tension, for whom adjusting the coccyx makes a huge difference. To that end, let's discuss coccygeal or tailbone dysfunction and correction.

First, a little review of history and exam findings. The history often includes a fall on a hard surface, landing directly on the buttocks or tailbone. Occasionally, the precipitating event could be sitting too long, especially while leaning backward, on a hard surface. The pain could be acute and recent, or long-standing. Even chronic coccyx pain can respond to manipulative approaches.

The key finding is tenderness, usually at the tip of the coccyx. The important part of the exam is to get your finger to the tip of the coccyx. Have the patient sit in front of you. Tell the patient what you are going to do and ask their permission. Slide your index or third finger forward, over their underwear, under their pants, in the midline. Have the patient bend forward fully, and slide further forward with your hand. Ask them to return to upright, and lift your finger as you slide it gently posterior until you hit the tip of the tailbone.

Sometimes, I end up still too far posterior with my contact, and have to have the patient repeat the forward bend. Once I touch the tip of the coccyx, I crook or bend my finger to

pull superior and posterior on the tip of the coccyx. This contact is almost always tender when there is a significant coccyx problem.

While I am here, I slide my finger laterally, first to the left, and then to the right, and feel the lateral sides of the coccyx, where the [lower portions](#) of the sacrotuberous (ST) ligaments insert.² The sacrotuberous is supposed to end at the lower sacrum, but there seem to be fascial fibers that connect down to the coccyx. I'll determine whether this more lateral spot is tender and/or has abnormal tissue texture. If the ST is involved, it will need to be addressed as well.

Having established that the coccyx is tender, I now have a high level of suspicion that the coccyx is stuck forward and/or that the lower ST ligaments are involved. My working assumption at this point is that there is a joint restriction of the coccyx. An internal exam is more specific and more accurate, but obviously more invasive. I'll explain my findings to the patient, and tell them what the corrective plan is and ask their permission. If I know them reasonably well, or they have come for this specific purpose, I may go ahead with the internal adjustment on that first visit. If this plan is a surprise to them, I may offer an external adjustment, telling them that the odds for successful correction are much less, to think about the internal correction, and to plan for it next time.

Here is how to do the external adjustment. This tends to work better on a short or stubby coccyx, where you can easily get your finger wrapped around the front of the tailbone. Have the patient sitting. Use the same procedures as the external exam. Take your index or third finger contact on the coccyx, with the tip of your finger anterior to the coccyx, and pulling gently backward. Have the patient slump forward with the whole spine into flexion, loading tension into the dura. I'll usually grasp the left shoulder, and bend the whole upper body and neck to the left or right, seeing which direction adds further tension, monitored at the coccyx.

Once I have "stacked" the tension, I will have the patient slowly extend one knee, slowly kicking forward, on the more involved side. This further loads the dura. As they extend the knee, I am slowly pulling posterior on the coccyx. This is usually quite uncomfortable to the patient. I will repeat three to five times, with about five seconds of pull each time, as they extend the knee. Once I am done, I will recheck the coccyx tenderness, to see if it changed.

I described the internal adjustment in my previous article, but I have changed a few parts of the procedure. I almost always have the patient side-lying. I am used to doing this with the patient on their left side. I always have an assistant in the room with me. I also have an informed-consent form for them to sign. I have the patient pull their pants and underwear down to their knees, and I drape them with a large towel. I put a glove on my right hand, and use lubricant. As I begin to enter the anal orifice, I will first have the patient relax and then contract the anal sphincters. There are two anal sphincters, one down low and one just above. When they contract and then relax, it both helps you know where your finger is and helps them relax.

There is a large variety of tissue textures along the distal aspect of the rectum. Getting through the rectal tissues to the tip of the coccyx can be the most difficult part of the procedure. Your finger is curving superior, and then back toward yourself. If you feel that you are stopped by the soft tissues, you need to change your direction until you are once again following the tube.

Your finger pad's destination is the anterior side of the bony coccyx. I will use the thumb of my left hand (my outside hand) to help me know where exactly I am. There are a couple of basic assessments done here. First, which segment(s) are most tender and restricted? The coccyx has between three and five small segments, but I will divide it into just three segments in this description. Does the coccyx extend? Does it come backward as you attempt to pull it in a posterior direction? If not, is the restriction in the joint between the second and third segment? This would mean that the very tip of the coccyx is restricted. Is the restriction up higher, between the first and second segment, or at the junction of the sacrum and the first segment of the coccyx? The tip of the coccyx, the most distal joint, is always relatively easy to palpate. The junction of the first and second segment is usually palpable. On a taller person, or if you have short fingers, the junction of the sacrum and first segment of the coccyx may be difficult to reach.

Once I am clear on where the specific tenderness and restriction is, I will begin the correction. The procedure can vary from mildly uncomfortable to excruciating. I have always been able to complete the procedure, without anesthetic, although I know chiropractic colleagues who use anesthesia for this procedure. The doctor's own comfort level, confidence and familiarity with these tissues will obviously affect the patient's response here. On a large person, I may tape my index finger, from the tip down into the metatarsals, to reinforce my finger strength.

I do the procedure with the patient in three body positions, to maximize the effect, with the dura and spinal canal in different positions. I will pull slowly backward on the most restricted segment, usually telling the patient I am going to do this five times and then slowly counting down as I do this. I start with the patient side-lying, with their knees slightly bent. I will then ask them to flex their head forward and bring their knees up toward the chest, and repeat the five pulls. Finally, I have them extend their head and neck, and extend and/or straighten the legs, and repeat five more pulls. I will then slowly withdraw my gloved finger, having them contract the sphincters gently as I do this. I now give them tissue and alcohol gel cleaner, and leave the room, telling them to open the door when they are ready. Once I am done, I will do a brief external re-exam. If I have been successful, they will usually have considerably less tenderness than previously.

As with many low-force mobilization procedures, there is inherently a soft-tissue component to the adjustment. When you are on the anterior surface of the coccyx, you are touching the fascia that lines the front of the bone. This soft tissue may need some kind of release. If I find a tender spot or feel that I am over a particularly significant spot, I correct this with a simple ischemic compression (pressure), possibly with a slight myofascial three-dimensional release in the direction of ease or restriction. This is

probably a more advanced concept. Try incorporating this after you have done 10 or 20 coccyx corrections.

There are risks inherent in any procedure. This is a relatively invasive procedure, at least compared to most of what you do. You are in the anus, an area which is usually not touched or addressed in any therapeutic manner. This procedure requires explanation, permission, and tact. I do a somewhat formal PARQ (*Procedure, Alternatives, Risks and Questions*) consult and document it. Do not push this procedure on someone who is not ready for it. In a female, be clear that you are entering the anal orifice. For the internal procedure, you need to know whether this is within the scope of practice for your particular state or venue.

On the physical level, the most likely risk is that you may irritate the rectal lining and cause some mild, temporary bleeding. The more severe risk is that you tear the rectal lining. I am lucky enough and careful enough to have never torn the rectal lining. I am gentle but definite when doing this procedure.

If the trauma was recent, the problem is relatively mild, and/or the patient is younger, one adjustment may solve the problem. In others, it may take several treatments. You may need to address the ST ligaments.ⁱⁱⁱ You may need to look at the whole pelvis, including the pubic bones and the SI and lumbar joints. If I don't get a positive response after three internal coccyx treatments, I will not continue.

If you have never been directly trained in this procedure, but want to do it, here are some suggestions for how to start. Find a staff person or a family member who is willing to volunteer to be your subject. Ideally, get a couple of sessions with a volunteer before you do this on someone in pain who needs it.

Examining and addressing the coccyx and lower sacrotuberous ligament can be important, both in tailbone pain and in a lower back pain with sacroiliac and/or dural involvement. You have not completed your lower back physical exam until you have established whether the coccyx and/or the sacro-tuberous ligaments origins are tender and/or have tissue texture changes. I hope this has been helpful.

References

ⁱ Heller M. "[The Coccyx.](#)" *Dynamic Chiropractic*, Feb. 12, 2004.

ⁱⁱ www.coccyx.org - a great site for information on coccyx problems.

ⁱⁱⁱ Heller M. "[Sacro-Iliac Revisited: The Importance of Ligamentous Integrity.](#)" *Dynamic Chiropractic*, July 2, 2005.