



Coccydynia (aka coccygodynia) is a word that means pain in the tailbone. Typically, it is made worse by long periods of sitting and can be felt most severely at the moment of standing from sitting.

From the outset, I would like to acknowledge that there is some controversy and disagreement amongst healthcare professionals about

how best to treat coccydynia. I have also met many people who have been mislead by the information on the internet into thinking that the only way to fix this problem is a coccygectomy (removal of the coccyx). This is a procedure I am happy to undertake when required and which I perform regularly but because of the risks involved it should not be the first step and is most frequently not required. What follows is what I have learned from my experience of treating many people with this condition.

Coccydynia is sometimes reported to be a mild and self-limiting problem. In my experience however there is a spectrum of disease and whilst some people are only mildly affected others have more severe symptoms. When people are more severely affected it can have a significant impact on a person's quality of life including activities such as sitting at work, travelling, hobbies (such as cycling) and personal life including intimacy and sexual relations.

I would like to offer the reassurance that for most people the outlook is good. In many cases, coccydynia resolves spontaneously of its own accord with time. Very few elderly people suffer from coccydynia. For those for whom it becomes a more significant problem treatments are available and in most cases, we do manage to get it to resolve.



How it happens:

There seem to be different times when people develop coccydynia:

Direct Trauma such as a fall landing on the tail bone (e.g. slipping on a wet surface or ice) is a common cause and may result in coccyx fracture.

Pregnancy and childbirth may result in both trauma and pelvic floor dysfunction. Childbirth is a common cause for coccyx fracture (and a broken nose for the child!) as the baby is delivered.

Weight loss can commonly cause coccydynia. Yes weight loss! Weight loss can result in decreased intra-abdominal pressure or "deflation of the abdominal balloon". After weight loss people can feel, for want of a better word, "flabby". This affects the pelvic floor as well as the abdominal wall resulting in pelvic floor dysfunction. The coccydynia normally resolves once the weight stabilizes, but it may take some time for that to happen. (I don't think it's got anything to do with less cushioning).

In some cases there can be more serious underlying causes such as infections or tumours or pain coming from other places (referred pain) such as the bowel. In some cases it can form part of a

chronic pain syndrome or dysfunction of the nervous system. In many cases it is 'idiopathic' meaning the underlying cause is not clear.



How things get worse (the negative feedback loop):

In my opinion, coccydynia results from dysfunction of the pelvic floor. What happens as you stand from sitting is that your insides (abdominal contents), under the action of gravity (and the contraction of abdominal wall muscles), have a tendency to fall through your pelvis to floor. The pelvic floor contracts to stop that. The muscles of the pelvic floor are attached onto the coccyx. As the muscles contract, they pull on the coccyx and if there is an abnormal (painful) movement between the coccyx



and the sacrum, this causes pain. The pain signal results in the subconscious brain sending down signals to the pelvic floor saying, stop, don't contract, your causing pain something is wrong and pelvic floor contraction is reduced. As a result the mobile coccyx is not stabilized, and it continues to move in an abnormal way, creating more pain, full stop.

How to make it better – Treatment:

There are a number of things that you can do to help yourself, and there are a number of things that can be done to help.

Things you can do:

Posture. Improving your sitting posture may help with coccydynia. Try to sit straight with your legs uncrossed, perhaps using a wedge shaped coccyx cushion. A wedge helps to tip your weight forward and take the pressure off the coccyx. A cut out section under the coccyx to relieve the direct pressure can also help.

Anti-inflammatory medication. If you can tolerate them, a course of anti-inflammatory medication such as ibuprofen or enteric coated naproxen taken regularly not as a pain killer but as a treatment for inflammation will slowly decrease the number of bad days and increase the number of good days you have and help to break the negative feedback loop.

Maintaining a stable weight. As we discussed above maintaining a stable weight can be important.

Pelvic floor exercises. The next thing that you can do to help yourself is pelvic floor exercises. For those of us with a traditionally British reserve this is a difficult thing to describe and perhaps embarrassing to talk about. The first thing to say is that, like any form of exercise, pelvic floor



exercises will only work, if you actually do do the exercises! So my advice is to find something you do regularly that you can use as a reminder, a trigger, to get into the habit. Perhaps it could be cleaning your teeth or driving to work? It should be something that you know you do regularly every day. Then whenever you do that activity do some pelvic floor exercises.

What exercises to do? The exercises that we want to do are slightly different from the typical exercises for pelvic floor following pregnancy. Those typically are aimed at the anterior pelvic floor and urinary continents. We want to direct exercises further back.

The way I describe the exercise is to say we're trying to exercise the muscle at the end of the bowel, the one we use to try and stop ourselves from opening our bowels. If you think of that moment when you try and stop your bowels from opening there are two things that you can do. You can try and squeeze your buttocks together or try and hold closed that internal sphincter muscle at the end of the bowel. That is the muscle we're trying to exercise and I would suggest simply trying to hold that muscle as tightly closed as possible and count to 10 and do that 10 times.

People often report that whilst doing the exercises it seems to "hit the spot" reproducing the coccydynia. It's my impression that this is very reassuring that the exercises are working, exercising the correct muscles.

Coccyx Cushions:

Consider purchasing a coccyx cushion. Noone like the thought of having to use a 'special cushion' but perhaps it can be used during activities that you know make your symptoms worse. Sitting as a desk? Despite the latest trends for 'memory foam', the best cushions in my opinion are wedge shaped with a cut out at the back to take the pressure off the coccyx. The wedge helps to correct sitting



posture tending to redirect the weight through the bottom of the pelvis (ischial tuberosities) thighbone rather than through the coccyx.

I am happy to recommend the book by Patrick Foy "Tail bone pain relief now". Sometimes it seems there are only two people in the world interested in this condition. Dr Foye and myself. He wrote the book first!

The book is an excellent review of the available medical evidence. The only part where I differ in protocol is when it comes to X-rays, and I think that results from practicing mainly in the NSH. In his book Dr Foy talks about the importance of assessing the mobility of the coccyx using sitting and standing X-rays. https://tailbonedoctor.com/about-dr-foye/

I prefer to do this physically examining the coccyx directly whilst undertaking treatment because I can combine it with other assessments at the same time.

Treatment

The first thing to say here is that doing all of the things that you can do to help resolve coccydynia as well as you can helps improve the likelihood of subsequent treatments working.

EUA MUA and injection of the Coccyx. Examination, manipulation and injection of local anesthetic and steroid under general anaesthetic is usually the next step. Unfortunately, I have found that most people are unable to tolerate this procedure without a general anaesthetic. Getting the best results requires careful examination and precise location of the therapeutic injection. This requires an internal examination, manipulation of the coccyx and injection of a mixture of local anaesthetic and an anti-inflammatory form of steroid.



A careful assessment of the coccyx at the same time is important. Examination confirmations the presence of a fixed or mobile coccyx (as per Foye's x-rays) and examination for other features such as evidence of previous pilonidal sinus, spinal dysraphism or any internal rectal problems that might lead to pain.

Importantly examination also allows an assessment of how technically difficult or otherwise a coccygectomy would be. Some people have relatively superficial tail bones others do not. This is because in some people the coccyx is straight or curls outwards towards the skin. In others the coccyx that curls internally. The combination of small buttocks and an externally curling coccyx makes coccygectomy relatively straightforward a coccyx that curls internally combined with larger buttocks can make the procedure much more challenging and a higher risk for complications.

I estimate that about 2/3 of people a single injection undertaken in this way (even when people have had other injections fail in the past) get better permanently.

Further investigation - MRI

For those people that don't get better after a first injection or for whom the pain returns ir is important to obtain an MRI of the sacrum, coccyx and pelvis, to exclude any more serious underlying pathology.

A second injection

Overall, I estimate about two thirds of people are made better by the first injection. Of those who are not made better by the first injection about two thirds are made better by a second.



Coccygectomy

For those that are not made better by a second injection, consideration should be given to coccygectomy. Perhaps because of the controversy surrounding treatment or perhaps because of the theoretical complications, some surgeons are reluctant to undertake coccygectomy which can leave some patients frustrated. In my experience, in most cases the procedure is relatively straightforward and may result in considerable improvement in symptoms.

Coccygectomy is a procedure to remove the coccyx. Such surgery should be considered major and not undertaken lightly and it carries with it risks. The risk I most worry about when undertaking this procedure is not the risk that is often talked about. The risk I most worry about is the risk of failing to improve the tailbone pain. For some removal of the coccyx does not improve the pain and when this occurs little more can be done. Why this occurs is hard to understand. If we did understand it, perhaps we could prevent it better! Sometimes failure to improve can occur when Coccydynia occurs as part of a pain syndrome or dysfunction of the nervous system. Sometimes we just don't know why symptoms don't improve.

The surgery is very close to the 'back passage' (rectum), and the likelihood of the skin being contaminated with bacteria and the wound becoming infected are quite high and higher than in other operations (2-5%). Antibiotics are provided at the time of surgery to reduce this, but it does not remove the risk completely. Also, advice is given to wipe from back to front after opening the bowels until the wound is healed.

If infection does develop it can be problematic to get it to heal, requiring prolonged courses of antibiotics and packing and dressing of the wound over a long period of time. Sometimes skin graft or plastic surgery are required.



Wound dehiscence. Every time you sit on a chair or indeed lavatory, the wound is put under the pressure and occasionally can pull apart so patients are advised to lie down rather than sit and to try and 'hover' whilst opening the bowel until the wound heals.

Incontinence. As the muscles of the pelvic floor are important for continence of both bladder and bowel and as we have already said those muscles partially attach onto the coccyx, removal of the coccyx can theoretically result in dysfunction of those muscles and therefore incontinence. In my experience, this is rare (<2%).

The most talked about and feared risk is the risk of needing a colostomy. The bowel sits directly in front of the coccyx and may (with an internally curing coccyx) wraps around the coccyx. If whilst dissecting the soft tissues to find the coccyx the bowel is injured or perforated and bowel contents leak into the wound this can be extremely problematic in getting the wound to heal, and a colostomy may be required in order for the wound to heal. If not detected early it could also result in more serious problems such a sepsis.

However, having said all this surgery is effective in many cases at improving symptoms (>70%), but it does not always result in complete resolution, and some have ongoing symptoms for some time following the procedure.

Further information is available at the following websites:

 $\underline{https://www.nhs.uk/conditions/tailbone-coccyx-pain/}$

https://spinesurgeons.ac.uk/Coccydinia-and-Operations-for-Coccygeal-Pain

www.thespinespecialist.co.uk

I hope you find this information helpful.