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Coccygodynia: Address of Osteopathy & Manual Medicine

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SUMMARY

Coccygodynia is characterized by pain located in the Coccyx and the sacrococcygeal joint. In general, coccygodynies have the reputation of being rebellious to pharmacological treatments: analgesic and infiltrations just give irregular success on the one hand, and surgery: a sometimes-heavy treatment for a modest lesion on the other hand. Manual medicine and osteopathy in coccygodynia occurring after a fall, bariatric surgery or after childbirth are almost all immediately cured by the maneuver we propose in this article. Osteopathic manual medicine is truly a first-line method of therapeutic choice regarding editorials and our own clinical experiences. The osteopath will determine what are the structures involved in coccygeal pain, investigate the different anatomical causes. He will thus be responsible for removing all joint, ligament and muscular blockages of the pelvis, both locally and remotely, which is not generally possible with pharmacological therapies.

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Coccygodynia is a localized pain in the tailbone, exacerbated when sitting and rising. The tailbone is a triangle-shaped bone (image 1), it is of paramount importance. Because, it is the central point on which you sit. Its small name would have been attributed to it by Herophilus (renowned physician of ancient Greece) who had noticed that this atypical bone had the same curved shape as the beak of the Egyptian cuckoo (bird) named Clamator Glandarius [1]. The tailbone is the terminal part of the spine. The muscle chains of the spine and many muscles of the pelvis are inserted at this level. From an osteopathic and orthopedic point of view, the tailbone plays a key role in balancing muscle tension in the spine and pelvis.

Image 1: X-ray of the coxo-coccygenous joint, the coccyx is framed in yellow.

Being located at the bottom of our spine, at the height of the buttocks, its main function could be comparable to that of a tripod foot. The tailbone consists of 4 (sometimes 3 or 5) vertebrae, all connected to the pelvis by ligaments and joints. The tailbone has two areas of mobility: From a neutral position, the tailbone extends during defecation or childbirth. The tailbone flexes during the contraction of the lifters (closure of the anal canal). When one sits, the tailbone flexes or extends depending on whether it is rather horizontal or vertical, dynamic MRI objectifies the action of the lifters that we have just illustrated above [1,2].

Since the tailbone supports the back and its posture while sitting, it is easy to imagine the severity of the situation if this part of your body was damaged. As small as it is, the tailbone has a primary role in the static balance of the body. Injured and painful, the tailbone can make an everyday life action as simple as sitting down impossible! The pain can radiate to the perineum, anus or buttocks and is often described as sharp, deep or superficial [2].

Conventionally, pain is increased by sitting, forcing patients to seek an analgesic position by sitting on a single buttock, or even to remain standing. Some patients note increased pain during bowel movements, sexual intercourse, and changes in positions to get up. The characteristics of this pain can take the form of permanent pain, with types of burns, tears, transfixing, heaviness and perhaps

permanent, with a variable intensity according to each individual, also his profession [3,4].

Coccygodynia is an uncommon condition, most often benign, but very distressing. A benign, usually rebellious condition, coccygodynia is "distressing to the patient and to the clinician" [4,5]. Simple discomfort or disabling affection with a strong psychic impact, it affects a little more women than men. Women are more commonly affected than men with an average ratio of three women to one man.

The technique we propose on this article allows a quick, sometimes immediate relief to most of those who have a mechanical origin and thus avoids surgery as was the case of two of our patients in 2022.

The Main Causes Can Be

A fall on the buttocks is the usual cause of traumatic coccygodynias, which according to the authors account for 60 to 70% of cases. Several small shocks repeatedly on the back as for bikers, motorcycle taximan, cyclists or people who practice horseback riding for example. Coccygeal pain is usually immediate, but in some cases there may be a latency time of one or two years between the fall and the onset of coccygodynia, in the meantime, mild pain in prolonged sitting or contact is usually noted [5,6].

Dislocation, a bad displacement of two articular surfaces that removes the connection they have between them. Dislocation often occurs in people who suffer from obesity and accounts for 20 to 25% of cases of coccyx pain. A sprain of the sacrococcygeal ligament. This ligament binds the sacrum to the coccyx. Too intense flexion of the tailbone when sitting, also called hypermobility. In lean subjects, a small bone spine (the coccygeal spine) can cause inflammation. This inflammation is called bursitis, which affects a pocket of fluid in your joints [3,5,6].

Abnormal stiffness of a coccygeal spine can create pain in your back. Neuralgia of the posterior branches of the sacral nerves. The lesion of the tailbone. In women, inflammation of the uterus can cause coccygodynia. Also in women, certain problems affecting the organs attached to the uterus (fallopian tube, ovaries) can be the cause of coccygodynia. A fracture of the tailbone due to fatigue or wear and tear is very serious and should be seen by a doctor as soon as possible. In some cases, it has been observed that prolonged depression in an individual could lead to bad habits that would lead to coccygodynia, frequent and long sitting time on hard seats can also be an origin of tailbone pain [4-6].

Some occur during childbirth. Some seem to be related to a lumbosacral problem, they follow low back pain or accompany low back pain and can disappear after lumbosacral manipulations (in osteopathy and orthopaedic manual medicine) or epidural infiltrations or mesotherapy with tablecloth on painful areas. Others are the consequence of anorectal infections and are mostly seen by proctologists. We observed one case of chordoma (tumor of embryonic origin) that manifested for two years only with coccygeal pain [3,6].

Others, finally, are said to be essential because no cause is found. The psychic causes are classic, they are sometimes obvious: appearance of coccygodynia after death of a loved one, divorce, etc. [5,6].

Clinic and Diagnosis

We observe in the clinic that pain in the sacrococcygeal region is easily labeled "coccygodynia". It is therefore necessary, to make this diagnosis, to find the characteristic sign of this condition is the pain at the pressure of the tip of the tailbone (image 2) that the clinician must objectify. Incidentally, the pressure on the sacrococcygeal joint is painful (images,3).

In some cases, in our practices, we have noted:
The existence of myalgic cords at the level of the sacrococcygeal insertions of the gluteus maximus or a myalgic point of the pyramidal, pain triggered when sitting or when coughing: Triggering a well-pronounced pain when you get up (image 3), this image three, better illustrates the direction of the lesion, or simply an extra-anatomical rigidity); Decrease or disappearance of this pain after lying down, recurrent lower back pain after a traumatic event such as a big fall or any accident in which there was a significant shock on the posterior part of your body, Sharp pain when pressing on the tip of the tailbone (image 2), Note that this coccygeal pain can radiate into the small pelvis, thighs, lower back and gluteal region. A cellulite infiltrate sometimes essential para coccygeal unilateral. Most often, there is just pain on the tip of the tailbone. A digital rectal exam makes it possible to feel hard and very painful muscular cords that belong to the elevator muscles of the anus or to the pyramidal muscle (piriformis).

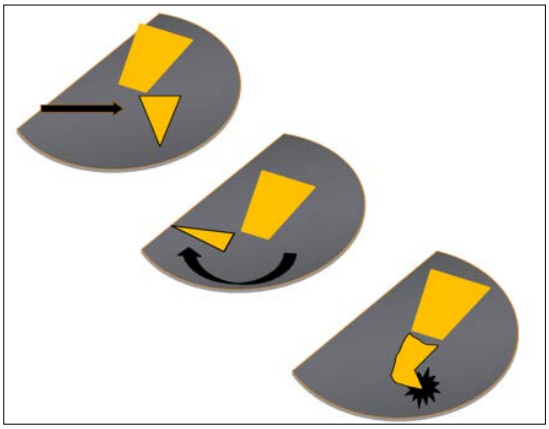

Image 2: 1) Posterior dislocation; 2)- Hypermobility in flexion; 3)-Thorn on rigid coccyx and 4: is all the others: fractures, calcification, dysplasia that are not in this picture below. (This image 2, is from the course University Diploma of Orthopaedic Medicine of Jean-Yves Maigne, at the University Hospital Center Cochin, Paris Center, when I was his student in 2018).

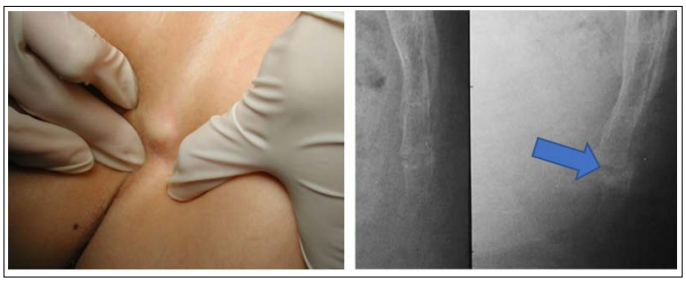

Image 3: Objectified clinical examination, posterior dislocation of a patient, and radiographic confirmation on the right. Pressure on the site on the left can cause severe pain.

Differential Diagnoses of Coccygodynia: the site of coccygeal pain can evoke other pathologies such as:

1. Pudendal neuralgia or Alcock's canal syndrome [2].
2. Endometriosis [7].

3. Sacrococcygeal pilonidal cyst [3].
4. Pathologies (hemorrhoids, fissures...) [5].
5. Piriformis muscle syndrome, sciatica [4].

Treatments

1. Pharmacological drugs: analgesic treatments, NSAIDs... (Do not treat most often, just helps to calm the pain)
2. Osteopathy [5-7].
3. Infiltrations (corticosteroids). Targeted mesotherapy with tablecloths around the algic zone.
4. Surgery (exceptional)

As noted above, coccygodynia has a reputation for being resistant to treatment. But, coccygodynia occurring after a fall or after childbirth are almost all immediately cured by the maneuver we propose below. The others are much less often compared to the literature [6,7]. Osteopathic manual medicine is truly a first-line method of therapeutic choice [5,6]. The osteopath (DO) or manual medicine clinician, or orthopedist trained in manual therapy, will determine what are the structures involved in coccygeal pain, investigate the different anatomical causes. He will be responsible for removing all joint, ligament and muscular blockages of the pelvis, both locally and remotely:

The clinician's targeted actions will be safe: the local joints affected, the lifters concerned, the perilesional muscles and fascia, the ligaments, with objectives detailed below, point by point:

Articular

restore complete mobility to the lumbar spine, sacroiliac joints, sacrococcygeal joint, pelvis.

The Massages of the Relievers

The techniques of John and also of Don & Simon [4-6].

Muscular

Restore and balance muscle tension in the pelvic floor muscles and back muscles. Let us not forget that the tailbone is an integral component of the spine and gift of the hinge: cervico-dorso-lumbar and sacrum.

Ligaments

Relaxation of the sacroiliac and sacrococcygeal ligaments, by osteopathic resting techniques and neuromuscular techniques, also techniques of manual medicine called guitar.

Manipulation of the lower lumbar (L3-L4-L5), sacrum and coccyx and rebalancing of the pelvic complex (iliac bones, sacrum, tailbone) [3,4].

Clinical Course

Massage: Massage of the relievers, the massage of the lifters already makes it possible to touch the finger of the accused and bring him all his manual softness (image 4,5). The therapeutic act is supposed to be painless and in turn, provide well-being to the patient. The rule of non-pain must prevail by this technique through the touch called contact.

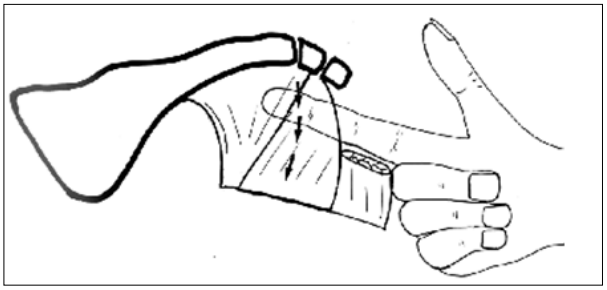

Image 4: Gentle contact for massage on the lifters, feeling of relaxation expected (3,4 and 7) R. Maigne and Yves Maigne

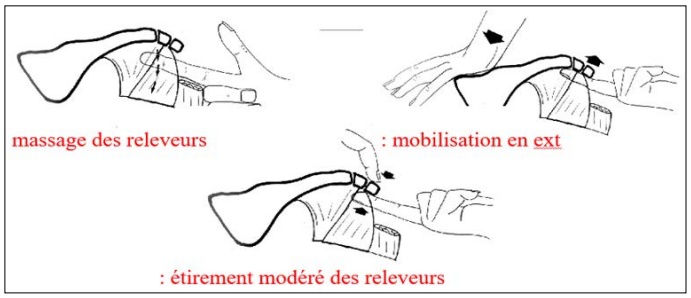

Image 5: Major techniques; unimanuelles and bimanuelles, while respecting the rule of no pain (3,4 and 7) R. maigne and Y. maigne.

The maneuver we propose seems to be above all a stretching of the elevator muscles that release their contracture, an essential element of coccygodynia. Indeed, the "rope" of the lifters disappears as soon as the maneuver succeeds. For some, this maneuver would have an action on the sacroiliac whose blockage - in "posterior sacrum" according to osteopathic terminology, could play a role in this condition [4,5]. L5-S1 suffering sometimes seems to be responsible for projected pain in the tailbone. Lumbosacral manipulation [5,6].

It is an effective maneuver, as noted by Robert Maigne and Jean-Yves Maigne but whose action is restful for the patient. A high proportion of sessions is usually necessary if only massages are performed [3,7].

For good efficiency, manipulations must be proposed, which aim to mobilize the coccyx seized between thumb (external) and index finger (intrarectal) according to flexion or extension movements, rotation. This osteopathic technique and manual medicine allow sometimes spontaneous and irreversible successes when well-practiced while respecting the times of anteriorization and posteriorization (anterior and posteriorization gesture of the injured coccyx) (image 3, 4).

Therapeutic Course of the Gesture

As the patient lies on his stomach, the clinician inserts his right index finger (or left if left-handed) into the rectum (the palmar face of the finger is pressed against the lower part of the anterior surface of the sacrum). Do not pull the tailbone, but keep it in hyperextension, as if one were making a decoaptation, not by pulling, but by stretching slightly in vertical image [4,5].

The clinician then leans with the "heel" of the left hand on the upper part of the posterior surface of the sacrum, and gradually puts firm pressure on it. It maintains this pressure for 20 to 30 seconds (this time is the time it takes to make a stretch beneficial), while the right index finger keeps the tailbone in hyperextension [8]. Without ever shooting (noticeably) at him. The operator has the impression of a sudden release which is undoubtedly that of the relievers. The maneuver is over. As a miracle, what we observed in the clinic, the support on the tip of the tailbone is no longer where is much less painful (sometimes this manipulation appears as anaesthesia). The patient can then sit up without embarrassment. It is occasionally necessary to repeat two or three times a few days apart to obtain a lasting result [3,4,7].

Image 6: A; gentle movement of anteriorization and posteriorization. B; normalization movement and vertical smoothing.

By adjuvant, eventually, the clinician of manual and osteopathic medicine will be able to see if the transition structure to the coccyx is rigid, a stretching of the peripheral structures, and therefore the sacrum, can be performed by the use of the pisiform of the right hand which creates a traction (from the distal to the proximal) and simultaneously crosses the opposite traction by the left hand (see image 7A). Or, depending on the clinical indication, the clinician could make a previous trust (see image 7B). This trust is sometimes very appreciated by our patients and has a big placebo effect that increases the real effect of the manual therapy previously performed.

Image 7: A; cross-stretch performed by the pisiform opposite and crossed; B; Trust manoeuvre (anteriorization and cracking).

Additional Advice Therapy

It is essential for some patients to avoid certain sports activities such as cycling, horseback riding and combat sports so as not to amplify the pain. On the contrary, the patient will have to adapt beneficial sports activities such as swimming that we have observed with some of our patients suffering from coccygodynia. We also observe that patients are experts in their disease: they themselves seek autonomously, isolated, and permanently an analgesic position. In this process of involvement in their own therapies, we also offer therapeutic seat cushions (image 8), or buoy dedicated to coccygeal or perineal pain. Applying alternately hot and cold, depending on the result felt on the painful area can be of great analgesic help. TENS with the electrodes at the four corners of the sacrum can also create a pain barrier (bread barrier) around the sacrococcygeal joint. Pharmacological treatments being less satisfactory, surgeons are disappointed with the results of coccygectomy (removal of the tailbone or part of it)", regarding the bibliography, we just recall the interest of returning to this old practice of manual medicine, so Professor Robert Maigne since the 80s already highlighted this [1,3, 5-7].

Image 8: Complementary therapies, coxal discharge and ring muscles victims, lifting tensions, in order to continue a professional life.

Clinical Case

The last practical case we received was Madam SUZI, 39 years old, mother of three children with an epidural delivery six months ago. She is referred to me by her doctor for intense coccyx pain and rebellious to any drug treatment. She is on the verge of tears, exhausted, exhausted, exhausted, and exhausted from suffering constantly as soon as she sits for a few minutes on a chair. The buoy relieves her insufficiently and prevents any desire to resume her professional activity as a secretary. A surgical decision to remove his tailbone becomes a hypothesis that is no longer in hibernation:

In osteopathic consultation: during childbirth, her labor lasted a dozen hours under epidural anaesthesia. The osteopathic clinical examination highlights a painful tailbone to the touch and thunderous muscle tension around the tailbone. SUZI. Presumably took a bad position during his work without realizing it. Because the alarm signal of pain was abolished by anaesthesia. His tailbone moved a few millimeters, causing reflex contractures to lock the muscles around the tailbone. I performed three sessions of osteopathy with manipulation of the tailbone and stretching of the muscles around the tailbone as explained above in this article. The pain completely disappeared, which allowed Mrs. SUZI to recover a normal life, and her pride was great that she let out a cry, Doctor, Luckily, I knew you, I was already considering surgery with the help of my doctor.

Conclusion

Coccyx pain can be easily diagnosed, but it poses therapeutic problems. Indeed, the many treatments proposed are often ineffective (because will not act mechanically on the tailbone): the patient generally undergoes many infiltrations, which temporarily calms the problem, but does not eradicate it. The patient can even be prescribed morphine, make several stays in a pain center, sit on an unsightly buoy, or even undergo surgical removal of the tailbone! Osteopathic treatment is regularly effective in most coccyx pain, several authors, from different periods cited in this article, note it on the one hand and our clinical experiences on the other hand. This treatment consists of manipulations of the vertebrae of the lower back, relaxation techniques of the muscles located around the tailbone, or even authentic painless manipulations of the tailbone by the introduction of a rectal finger as we demonstrate on the images above.

Declaration of Links of Interest: The authors declare that they have no links of interest.

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