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Acupuncture for Chronic Coccydynia
Following a Traumatic Fall:

Acupuncture for Chronic Coccydynia Following a Traumatic Fall: A Case Report

By Kat Shea, DAChM, LAc

Abstract

Chronic coccydynia (coccyx pain) can significantly impact quality of life and functional mobility. Conventional treatment options are limited or ineffective for long-standing cases. In this case study, a 31-year-old female with chronic post-traumatic coccydynia and associated urinary dysfunction was treated over six months using an integrative East Asian medicine diagnostic framework and traditional therapies, including acupuncture, trigger point (ashi) therapy, tuina, and topical liniments. Localized treatment of the coccygeal area, combined with systemic approaches to address the patient's overall constitution, resulted in subjective pain reduction and improvements in functional mobility and urinary control. Results suggest that acupuncture may play a significant role in treating chronic coccydynia.

Keywords: Acupuncture, coccyx pain, coccydynia, Du channel, case report

Introduction

Chronic coccydynia refers to pain for more than three months in the region of the coccyx bone. Coccydynia can present as localized, sharp, or aching pain often exacerbated by prolonged sitting, transitions from sitting to standing, or activities that involve direct pelvic compression (Sandrasegaram et al., 2020). Common etiologies of coccydynia include traumatic injuries, like falls or childbirth, repetitive microtraumas, postural issues, or idiopathic causes.

Although statistics of diagnosed cases of chronic coccydynia remain unreported, the Journal for Nurse Practitioners states that up to 3% of low back pain can be attributed to coccydynia (Gufeld et al., 2022). Women are more prone to coccygeal instability and posterior luxation when seated and are five times more likely than men to suffer from coccydynia, likely due to

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pelvic anatomy and obstetric factors (Maigne et al., 2000). Even when chronic coccydynia is diagnosed correctly, it is estimated that over half of the patients with chronic coccydynia do not experience meaningful relief from conventional treatments alone. A 36-month prospective observational study of 115 adults with chronic coccydynia treated conservatively (defined as corticosteroid injections and manual therapy) found that 51% of patients experienced unfavorable outcomes, defined as pain of more than 3/10 at the 36-month mark (Charrière et al., 2021).

Conventional medical management includes anti-inflammatory medications, pelvic floor physical therapy, ergonomic supports, corticosteroid injections, and, in refractory cases, surgical removal of the coccyx. These modalities are often insufficient for resolving chronic cases or can result in adverse outcomes, such as pelvic floor prolapse, ongoing pain, and local infections (Kwon et al., 2012). These insufficient outcomes and research findings regarding prevalence highlight the substantial unmet need in chronic coccydynia care and provide the rationale for exploring complementary modalities like acupuncture.

Recent research has begun to explore the potential of acupuncture or manual therapies as a non-pharmacologic intervention for chronic coccydynia. NCCIH studies show acupuncture to be effective in managing chronic musculoskeletal pain, including low back and pelvic pain, because of its ability to modulate central pain pathways, reduce inflammation, and improve local circulation (Vickers et al., 2018). Case reports such as Lin et al. (2020) suggest that low-level laser acupuncture can effectively treat refractory coccydynia following a traumatic coccyx fracture, highlighting the potential of using laser acupuncture as a conservative intervention for chronic coccydynia.

This case study explores the successful clinical trajectory of a female with chronic post-traumatic coccydynia and associated neuromuscular and urinary dysfunction who was treated over six months using an integrative approach of acupuncture, tuina, and herbal liniments with TDP (far infrared) lamp therapy.

Case Description

A 31-year-old female acupuncturist presented with 11 months of chronic coccydynia following a series of multiple falls, most significantly, a fall on her coccyx bone occurring in November 2023. Her symptoms included daily coccyx pain of 2-4/10 baseline pain with frequent flares reaching 6-7/10 pain,

difficulty sitting for extended periods of more than five minutes on hard surfaces, and pelvic floor dysfunction with urinary incontinence.

She had a history of mild iron deficiency and Hashimoto's hypothyroidism, intermittent low back pain and stiffness, and had a previous traumatic fall in 2020, which resulted in extended hamstring tightness. Following the initial injury, she applied self-directed daily applications of Zheng Gu Shui topical trauma liniment combined with TDP heat lamp for three weeks, along with craniosacral therapy, all of which yielded minimal relief.

Diagnostic Assessment

The patient presented with an average build and BMI. Both cun and guan pulse positions felt at medium depth with a strong and slightly slippery quality. Chi positions were deep and weak.

The integrative approach to assessment was guided by traditional Chinese medicine (TCM) theory as well as conventional orthopedic and anatomical assessments. A TCM diagnosis of qi and blood stagnation in the Du and UB channels and the Engaging Vitality (EV) diagnosis of deficient Kidney yang qi circulation were used to guide the treatment.

According to the article *Moxibustion on top of a medicinal cake for the treatment of coccyx pain: A report of 15 cases* by Lou Yuejuan—coccydynia—whether caused by prolonged sitting postpartum or by trauma such as a fall, has an underlying pathogenesis involving damage to the zheng qi, leading to stagnation of qi and blood within the channels which results in the formation of blood stasis and subsequent persistent pain (Yuejuan, 1999).

In this case study, the patient was diagnosed with qi stagnation, as evidenced by pain that was distending and dull. However, upon sitting for more than five minutes, the pain became fixed, focal, and sharp, indicative of blood stagnation (Macciocia, 1989, p. 193). Larre and Rochat de la Vallée's (1997) translation of the *Yellow Emperor's Inner Classic: Basic Questions, Su Wen* chapter 60 states: "When Du mai gives rise to illness the spinal column stiffens and is as if broken, (against flow)." This passage illustrates the pathology of the Du mai, which arises from poor regulation of the yang qi in the back (p. 48). The authors further explain that there are two types of Du mai pathologies: "One is a perverse fullness which creates a kind of over-tension in the bones and in the muscular attachments of the spine. This is because the pressure of the perverse qi creates a kind of swelling, which in turn causes pressure,

resulting in stiffness and pain as if the back were broken. Sometimes you can have the same symptoms due to an emptiness of yang qi” (Larre & Rochat de la Vallée, 1997, p. 48).

The Du mai, considered the “sea of yang channels,” exerts influence on all yang channels and can strengthen the yang of the body, the spine, and tonify Kidney yang (Macciocia, 1989, p. 358). In this case, the patient presented with a Du channel pathology, characterized by qi and blood stagnation along with a deficiency of Kidney yang qi circulation. Larre and Rochat de la Vallée (1997) also note: “The lower orifices, which are under the authority of Du mai and Ren mai, may also have a lack of the power necessary to contain and to hold, because the yang is rising too much. This would cause urinary incontinence and hemorrhoids due to bad circulation and stagnation” (p. 51). In this case, symptoms of low back pain and forceless urination, as well as clinical signs of deep, weak chi pulses and palpation of empty points such as KD3 (Taixi) and Du 4 (Mingmen) led to the diagnosis of insufficient Kidney yang qi circulation.

Integration of Palpation Methods of Assessment

Palpation and mobility of the coccyx bone were tested in both standing and seated positions. Anterior-Posterior test and Lateral Flexion test of the coccyx revealed coccyx fixation to the left and in flexion (Barral, 1993, pp. 76-77). The EV evaluation, a set of osteopathic palpation techniques used to determine the site of treatment, validated the left side of the coccyx as the problem area (Bensky & Chace, 2014).

Ashi points UB34 (Xialiao) and UB58 (Feiyang) left side, Du 2 (Yaoshu), and Du 1 (Changqiang) were needled based on pain sensations reported on palpation. In Chinese, the term ashi literally means “Ah yes!” or “That’s it!” and refers to points that when pressed, cause the patient to exclaim recognition of the painful spot. In modern musculoskeletal medicine, ashi points correlate strongly with myofascial trigger points (TrPs) (Dorsher, 2009; Lee et al, 2022).

Treatment /Therapeutic Interventions

Treatments were performed by a licensed acupuncturist with five years of experience in a private practice setting. The treatment plan consisted of ten total treatments over six months. The frequency of the visits was once weekly for four weeks. Due to noticeable improvements in symptoms and physical examination markers, visits were then reduced to every other week for two

visits, followed by once monthly for four more visits for maintenance. Each session lasted 60 minutes and focused on resolving coccydynia, releasing myofascial restrictions, and regulating urinary function.

The treatment plan included local and distal acupuncture points chosen based on palpation and physical examination, along with systemic acupuncture points to address the patient's constitution. Local points (Table 1) were needled primarily on the left side with a variety of needle sizes and lengths, and varying depths, aiming to achieve needle sensation. Local points included conventional acupuncture, and dry needling techniques like trigger point needling and osteopeccking.

Other integrative modalities (Table 2), such as tuina sacrotuberous ligament release, Hong Hua Jiu, and TDP heat lamp, were performed in numerous treatments adjunct to acupuncture. Distal points (Table 3) were needled on either side of the body with a variety of needle sizes, lengths, and depths, aiming to achieve the needle sensation. Notably, not all points used in the case are listed, as many were used for symptoms unrelated to this specific case.

Table 1. Relevant Local Points Needed

Point Needed	Chinese Name (Pinyin, Characters)	# of times used
Trigger point (TrP) left coccygeus	Āshì (阿是)	6
UB35	Huìyáng (会阳)	6
Du 1	Chángqiáng (长强)	5
Du 2	Yāoshū (腰俞)	6
Osteopecck Du 1 & Du 2 (periosteal needling technique)	Chángqiáng (长强), Yāoshū (腰俞)	1
UB34	Xiàliáo (下髎)	4
Shiqizhuixia "Below the 17th vertebra" – extra point below L5	Shíqīzhūxià (十七椎下)	7
UB31–UB33	Shàngliáo (上髎), Cìliáo (次髎), Zhōngliáo (中髎)	2
SI joint, right	– (anatomical location, not a classical point)	1

Table 2. Adjunct Modalities

Modality Used	# of times used:
Sacrotuberous ligament tuina release	6
Heat lamp on sacrum/coccyx	10
Hong Hua Jiu (Chinese & Spanish safflower, pine resin, vodka liniment) on coccyx surrounding needles	3

Table 3. Relevant Distal Points Used

Point Needed	Chinese Name (Pinyin, Characters)	Clinical Reasoning	# of times used
T12/L1	— (thoracolumbar junction, not a standard point)	Regulates spinal junction	3
Du 4	Mingmén (命门)	Connects Du channel to Kidney fire, tonifies Kidney yang	2
Du 8	Jínsuǒ (筋缩)	Soothes sinews, relieves spinal stiffness	2
Du 9	Zhiyáng (至阳)	Facilitates yang reaching diaphragm region	3
Du 15	Yǎmén (哑门)	Sea of Qi point, top of the spinal column	3
KD3	Tàixī (太溪)	Tonifies Kidney yang	3
HT3	Shàohǎi (少海)	Regulates Heart channel; supports Heart-Kidney connection	2
UB58	Fēiyáng (飞阳)	Luo-connecting point of UB; removes obstruction, strengthens Kidney	2
UB53	Bǎohuáng (胞育)	Opens water passages in lower burner; stimulates fluid transformation/excretion	2
UB57	Chéngshān (承山)	Relaxes sinews, invigorates blood	1
SJ5	Wàiguān (外关)	Treats painful obstruction	2
SP4	Gōngsūn (公孙)	Accesses inner spine and pelvic floor connection	1

Local treatment included trigger point needling techniques, conventional acupuncture, tuina manual releases, and herbal liniments with TDP heat on the coccyx. According to Travell, "Normally, the sacrococcygeal joint is freely movable. The coccyx normally extends through an arc of about 30 degrees and bends laterally to bring the tip about 1 cm from the midline. Mobility is greater in women than in men. Bilateral tension of the coccygeus muscles tends to flex the sacrococcygeal joint. Unilateral coccygeus muscle tension pulls the coccyx toward one side." (Travell, Simons, 1992, p. 122) Likewise for this patient, the coccyx mobility was limited and fixated left and in flexion.

Trigger point needling on the left coccygeus muscle was performed in six of the visits to a depth of about 40 mm, achieving at least one fasciculation to relieve coccygeus trigger points. Release of the sacrotuberous ligament from tuina was performed in six visits to address the coccyx pull on the left. Travell emphasized that practitioners should identify and correct any "articular dysfunctions of the sacroiliac joints, sacrococcygeal articulation, and the lumbosacral junction" as they may be "aggravating sources of TrPs in these pelvic floor muscles." (Travell, Simons, 1992, pg. 122) Extra point Shiqizhuixia (lumbosacral junction), ashi point at the Du channel point at the thoracolumbar junction (T12/L1 junction), right sacroiliac joint, Du 2 (sacrococcygeal hiatus), and osteopeccking between Du 2 and Du 1 (sacrococcygeal articulation) were all needled to help rectify articular dysfunctions. All of the treatment strategies above were used to realign the displacement of the coccyx bone back to midline, restore mobility, and address the coccydynia.

Travell also stated that the "coccygeus muscle derives its innervation from fibers of the S4 and S5 segments via the pudendal plexus" and "all of the perineal muscles are innervated by the second, third, and fourth sacral nerves" (Travell, Simons, 1992, pg. 117). This patient's left side, from UB32 to UB34 (Xialiao), was needled to improve innervation of the pudendal nerve, aiming to modulate pain and enhance pelvic floor function, which affects urination. UB35 (Huiyang) on the left was needled for six visits and is where yang power gathers and "exits from yin to yang at the beginning of the spinal column" (Larre & Rochat de la Vallée, 1997, pg. 37). Du 1 was needled in five visits to help locally relax pelvic floor muscles and support circulation of yang in the Du channel. Another local intervention involved the use of Hong Hua Jiu, combined with TDP lamp heat, directly on the coccyx bone surrounding the local needles for 30 minutes, three times, to introduce warmth and facilitate blood flow at the base of the sacrum.

Distal acupuncture included points along the Du mai, including Du 4, where the Du channel connects with Mingmen to fortify Kidney yang fire, up to Du 9 (Zhiyang), where yang reaches past the diaphragm to the lungs, all the way up to Du 15 (Yamen), where the Du mai meets the Yang Wei mai at the top of the spinal column. UB channel points, such as UB53 (Baohuang), UB58 (Feiyang), and UB57 (Chengshan), all contribute to opening water passages in the lower burner, strengthening the kidney organs, stimulating the transformation and excretion of fluids, and relaxing sinews to help invigorate blood (Macciocia, 1989, p. 423). KI3 (Taixi) and HT3 (Shaohai) were needled three times to tonify

the Kidney yang and regulate the Heart's connection to the Kidney, addressing the presenting Kidney yang deficiency. SJ5 (Waiguan) was needled twice to treat general painful obstruction, and SP4 (Gongsun) was treated once for its connection to the pelvic floor and access to inside the spinal column. The overall principle of distal acupuncture was to tonify Kidney yang and help facilitate the flow of yang qi along the spinal column. In contrast, local acupuncture addressed the local qi and blood stagnation of the Du mai.

Outcomes

Symptom tracking was based on patient self-report, clinical observation, and evaluation at each visit. Over the course of six acupuncture treatments, the patient reported consistent pain reduction along with improvements in neuromuscular function.

Significant improvement was reported by the second treatment, with resolution of symptoms by the fourth treatment. Daily coccygeal pain initially ranged from 2–4/10 baseline pain with frequent flare-ups to 6–7/10, decreasing by the end of the treatment series in both intensity and frequency to 0–1/10, equivalent to baseline pain, with only one 30-second flare-up of 5/10 pain after sitting for two hours on a hard surface.

Functional activities, such as tolerating sitting on hard surfaces without discomfort, body rocking on hard floors, transitioning from sitting to standing, and engaging in moderate-impact physical activity like strength training were restored without exacerbating symptoms.

Manual palpation indicated improved coccyx mobility, decreased myofascial tension in the left pelvic floor musculature, and a correction of coccyx bone alignment to midline by the fourth treatment. The patient reported substantial improvements in pelvic floor control of urinary flow, with diminished urinary leakage except during rare instances of vigorous coughing. The patient reported no adverse events and a high adherence and tolerance to treatment.

Discussion

This case demonstrates the clinical utility of integrating local and distal acupuncture, herbal liniments with heat, and manual therapy in addressing chronic coccydynia with accompanying urinary dysfunction. Barral wrote that "coccygeal restrictions have a significant influence on bladder function... it is

almost impossible to achieve positive effects through manipulation of the bladder if the coccyx is fixed (Barral, 1993, p. 30). Freeing the coccyx bone with local acupuncture, tuina, and liniments, as well as tonifying the Kidney yang via local and distal points, helped restore the function of the Urinary Bladder organ system.

It is also interesting to note that by Treatment 9, after the coccyx bone had been realigned and pain had been greatly diminished, the patient reported feeling left hamstring pain similar to her 2020 hamstring strain injury, which she reported had "never fully recovered." This hamstring-pulling pain resolved in two subsequent treatments, and the patient reported increased strength in her left hamstring. This raises the question of whether the 2020 hamstring injury, which predated the 2023 coccyx injury, was a contributing factor to the displacement of the coccyx bone.

Limitations of this case included a lack of imaging. To diagnose coccygeal fractures or coccygeal instability, dynamic X-rays in both seated and standing/prone positions are necessary. "Obtaining sit-stand X-rays is a huge challenge for patients and their doctors. Very few radiology centers have ever even heard of tailbone X-rays being done while you are sitting" (Foye, 2015, p. 47). Ideally, the patient would have had dynamic X-rays before and after the course of treatment.

Treatment used several East Asian medicine modalities, not just acupuncture alone; therefore, it is difficult to assess whether acupuncture, as a stand-alone modality, would have resulted in such a rapid resolution. The addition of tuina's sacrotuberous ligament release helped realign the coccyx bone.

Patient Perspective

"Kat alleviated my pain drastically in 1 treatment. Seven treatments later, with my most recent being almost a month ago now, I'm still pain free! If you care to know, I fell on my tailbone back in November of 2023. Didn't seek treatment until November 2024 as I figured it was a pain I would be relegated to dealing with... For over a year, I could not sit on any hard surface for more than 5 minutes before feeling pretty severe pain in my tailbone. Forget trying to sit on the floor and roll backwards- that was completely out of the question. Sitting back on a couch or soft chair was even uncomfortable after short periods of time. When standing up from sitting, the pain would linger for at least

a minute, frequently stopping me in my tracks. I couldn't even squat or run without feeling significant discomfort. I'm 30 years old; this is not okay, I thought to myself but didn't know what to do. I'm not kidding when I say after ONE treatment I could feel a positive shift. I legitimately did not feel any pain for 3 days after treatment. Considering I had over 365 days with daily pain, I was floored. Following the treatment plan, I followed up weekly for the next 3 weeks. By this time, I was able to go 10 days before the pain crept back in. Over the next month, I had two treatments- one every other week. By this time, I was easily able to go three weeks without treatment. My last treatment was mid-January. I'm sitting here mid February writing this and still PAIN free. I have had one minor flare after sitting for 3 hours on a hard non-cushioned chair, but it only lasts for 30 seconds and does not persist or come back when sitting again. I have a follow-up scheduled for mid-March, as I will be taking a 10-hour flight a few days later. This is scheduled as just in case, maintenance, to ensure I will remain pain-free."

Conclusion

This case is notable for the successful resolution of persistent coccydynia and accompanying urinary symptoms using traditional diagnostics and integrative methods. The results suggest the efficacy of acupuncture to not only alleviate pain, but also address underlying urogenital dysfunction associated with chronic coccydynia. This case study is intended to add to the growing literature supporting acupuncture as part of an integrative approach to treat coccydynia. Future research is recommended to validate and expand upon these findings.

Informed Consent

Written informed consent was obtained for publication of this case report.

Statement of Safety

There were minimal safety concerns, and no adverse events were reported.

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