#### Connecticut Chiropractic Association District Meeting James J. Lehman, DC, MBA, DABCO Assistant Professor of Clinical Sciences University of Bridgeport College of Chiropractic

### **Clinical Question:**

### Select the conservative care that you would consider prior to surgical excision for

### coccygodynia?

Please circle your choice(s)

- 1. NSAIDS
- 2. Donut cushion
- 3. Diathermy
- 4. Cryotherapy (ice)
- 5. Spinal manipulation
- 6. Coccygeal manipulation
- 7. Myofascial treatment
- 8. Radiotherapy
- 9. Manipulation of coccyx under anesthesia
- 10. Hot baths
- 11. Injections of anesthetics with corticosteroids
- 12. Psychotherapy
- 13. Other

## **Clinical Question:**

### What is your diagnosis?

Please circle one.

- 1. Normal sacrococcygeal joint
- 2. Hypomobility of sacrococcygeal joint
- Hypermobility of sacrococcygeal joint
- 4. Subluxation of sacrococcygeal joint
- 5. Luxation of sacrococcygeal joint
- 6. Dislocation of sacrococcygeal joint



Please describe how you would manage this patient.

# Clinical Questions

- Is the coccygeal position abnormal?
- 2. Do you think the coccygeal position could be a cause of coccygodynia?
- 3. How would you treat this patient if she were suffering with coccygodynia?



#### Case Report by James J. Lehman, DC, DABCO

A 30 year-old female chiropractic student with a chief concern of "pain in the tailbone" presented for evaluation and treatment on November 17, 2008. During August of 2008, she was walking on a parking lot and slipped on some mud. She fell onto the left side of her buttocks and incurred some scrapes on her left hand. Initially, her hand bothered her more than the pain in the buttocks. Following the fall during November of 2008, she began a regular exercise program with an elliptical trainer and an arc trainer, which produce up to 90 degrees of hip flexion. The coccyx pain came on gradually after she began the exercise program but within two weeks it became unbearable. She had trouble sitting in class all day without pain. If she leaned back in her seat, she experienced a pain that would radiate into her lower abdominal area, which triggered a feeling of nausea. Due to apprehension about experiencing these sensations again, she avoided leaning back in her seat.

The female patient described the pain as a local, deep, dull achy pain that made her nauseated. She denied any radiations down her legs. Sitting, standing, and walking increased the pain while a recumbent position eliminated the pain. The patient avoided sitting on her coccyx in order to prevent pain in the tailbone that she graded at a level of 9 of 10. Standing and walking produced pain in the tailbone area that she graded at a level of 6 of 10. Although coughing increased the pain in the region of the tailbone, she denied an increase in pain with sex or defecation. Occasionally, pain was experienced pain with rising to stand. Although she denied receiving any treatment for the current condition, one of the clinical professors did elicit severe pain at the tailbone with external palpation of the sacrococcygeal region.

Her past history included a fall on the buttocks 16 years ago during the summer of 1992 while attending the tenth grade. This episode of pain in the tailbone bothered for about one year with sitting but not with standing. She described the pain sensations for the initial episode similar to the 2008 episode of pain in the tailbone area. Later in the year she again injured her coccygeal area when she was involved in an automobile and pedestrian accident. She provided a description of her past history of the initial coccygeal injury.

In the summer of 1992, I was at a new friend's house and was in her bathroom for the first time. There were a bunch of girls doing their hair and makeup and I was just in there talking with them. So, I leaned back against what I thought was a wall and turned out to be a shower curtain. So, with full force I fell back into the bathtub directly onto my buttocks. The pain was excruciating. At that time, it was probably a 10 on a scale of 10. I was sore for a few days after the fall, but I never sought medical treatment for it.

A few months later on November 4, 1992, I was crossing the street and was struck by a vehicle that was traveling in a turning lane. My view was obstructed by a van stopped at a red light and I didn't realize that the turning lane had a green light. I ran into the vehicle at the area of its front left tire. I rolled up onto the hood of the car and shattered the windshield with my head. I was thrown off the car and fell to the pavement. Four layers of clothing were torn through and I had an abrasion over my sacral apex. It must have been me being thrown and skidding across the road on my buttocks. Due to the head trauma, my memory of the incident is a little blurry. The doctors in the ER didn't address

this area as I was more concerned with leg and head pain at the time. Throughout the rest of my sophomore year, I remember having a hard time sitting in my seat at school due to the pain in my coccyx. It gradually went away by the summer of 1993.

Physical examination revealed that she experienced pain in the area of the coccyx with walking and sitting. She pointed to the coccygeal region as the site of the pain. Rectal examination revealed slight discomfort with passive extension of the coccyx, which she denied as the chief complaint. There were no signs of dislocation or instability of the coccyx but palpation of the levator ani produced localized pain. The patient confirmed that this pain replicated her chief concern. Palpation of the obturator internus produced referred pain down the posterior aspect of the lower extremities but not below the knees while palpation of the coccygeal muscles produced localized pain bilaterally. Palpation of the pelvic floor muscles revealed tautness, nodular formations and pain. A total of eight myofascial trigger points were discovered in the levator ani, obturator internus, and coccygeal muscles with symmetrical distribution. There was an absence of frank blood with removal of the gloved examining finger.

The patient was advised that she was suffering from coccygodynia due to strain of the levator ani, coccygeal and obturator internus muscles with resultant active, myofascial trigger points. She received a complete explanation of the intra-rectal trigger point pressure release procedure (TPPR) with its expected results and possible complications of increased pain or a lack of response to care. The patient provided consent and requested the treatment.

She was properly gowned and assumed a left lateral decubitus position with her knees and hips flexed to 90 degrees. First, the coccyx was palpated externally. Next, an intra-rectal examination was performed. Finally, conservative manual medicine management consisting of TPPR was performed to inactivate the central myofascial trigger points located in the pelvic floor muscles. TPPR was applied to the levator ani, coccygeus, and obturator internus muscles bilaterally. Palpation and pressure over the trigger points recreated the lower abdominal pain and produced local pelvic floor pain. The intervention was performed with discomfort but was well-tolerated by the patient.

Immediately following the treatment, she was able to sit on a hard surface with 90% relief of the coccygodynia and ambulate with 70% reduction of the pain. The patient was advised to return for additional treatment only if the symptoms persisted. We offer her most recent account of her response to care eight months post treatment to document her successful recovery.

My pain decreased immediately after treatment. That evening, I was able to sit down with less pain and no symptoms of nausea like I had been experiencing. I misunderstood Dr Lehman's instructions and I exercised the following evening. It caused a temporary increase in the pain again, but the severity was not as high as it was before treatment. It was a 3 on a scale of 0-10. Dr Lehman then instructed me to not use the elliptical trainer for 6 weeks. I followed his instructions and used the treadmill instead. Since then, I have only experienced a few episodes of mild pain in the area, after prolonged sitting. The severity of these episodes never exceeds a 2/10. I currently have no pain today (0/10). I have also used the elliptical machine on numerous occasions with no pain as a result.

### Protocol for Intrarectal Coccygeal Evaluation and Management James J. Lehman, DC, DABCO

- 1. Chief Concern: "Pain in tailbone area"
- 2. History of trauma
- 3. Chronicity (>3 months)
- 4. Sitting on a firm surface is painful
- 5. Pain is moderate to severe (VAS 4-10/10)
- 6. External palpation of coccyx is painful
- 7. Internal palpation of coccyx is painful
- 8. Painful active trigger points revealed in the levator ani and coccygeal muscles
- 9. Imaging for FX, dislocation/luxation, subluxation.
- 10. Provide full explanation of procedure, benefits, risks, alternatives
- 11. Record informed consent process
- 12. Patient is advised that the procedure will be uncomfortable
- 13. Advise patient that the results of a successful treatment will be evident immediately

following the intervention.

14. The patient will be advised to sit on a firm surface and determine if pain severity is reduced or eliminated following treatment.

- 15. Patient is advised to evacuate bowel prior to treatment
- 16. Patient is advised that she will be wearing a gown with the open part in the back
- 17. Patient is advised that she will need to remove panties.
- 18. Exam room should be near a restroom
- 19. Patient is gowned and placed in a lateral decubitus position with knees flexed
- 20. Provide patient with tissue
- 21. Sheet or large towel covers the buttocks and lower extremities
- 22. Ask patient if she is ready to begin.
- 23. If she agrees, then prepare for the exam
- 24. Place towel on exam table inferior to the buttocks of patient
- 25. Place lubricant (KY jelly), examination gloves, and tissues
- 26. Put glove on examining hand and apply lubricant to examining finger

27. Examine anus and apply lubricant

28. Advise patient that you will insert your lubricated finger

29. Slowly insert examining finger while confirming patient is tolerating the procedure

30. Advise patient you will stop if the pain is not tolerable

28. Palpate the coccyx for pain and motion

29. Manual treatment most often involves an anterior to posterior mobilization of the coccyx with the internal digit

30. The external hand contacts the posterior sacrum to stabilize

31. The internal digit gently and slowly applies mild traction to the coccyx from superior to inferior

32. If the joint is stable, the mobilization is performed three times.

33. If unstable, the reduction should be performed only once.

34. Palpate the pelvic floor muscles for sites of pain and hypertonicity

35. Identify the myofascial trigger points and treat with myofascial trigger point releases

36. Apply gentle but firm continuous pressure to the trigger point and hold for 10 seconds.

37. You may find one to six trigger points in the levator ani, coccygeus, and obturator internus on each side.

38. You must examine and treat bilaterally.

39. Normally, a reduced severity occurs while applying the pressure.

40. Upon completion of the exam and treatment, ask the patient if she is ok and then advise her the procedure is completed.

41. The patient may prefer to use the restroom facility immediately post treatment.

42. Examine for pain reduction by asking the patient to sit on a firm surface in extension.

43. An appropriate response to care will permit the patient to sit with a complete relief of pain or a significant reduction in severity.

44. Oftentimes, one or two treatments resolve coccygodynia.