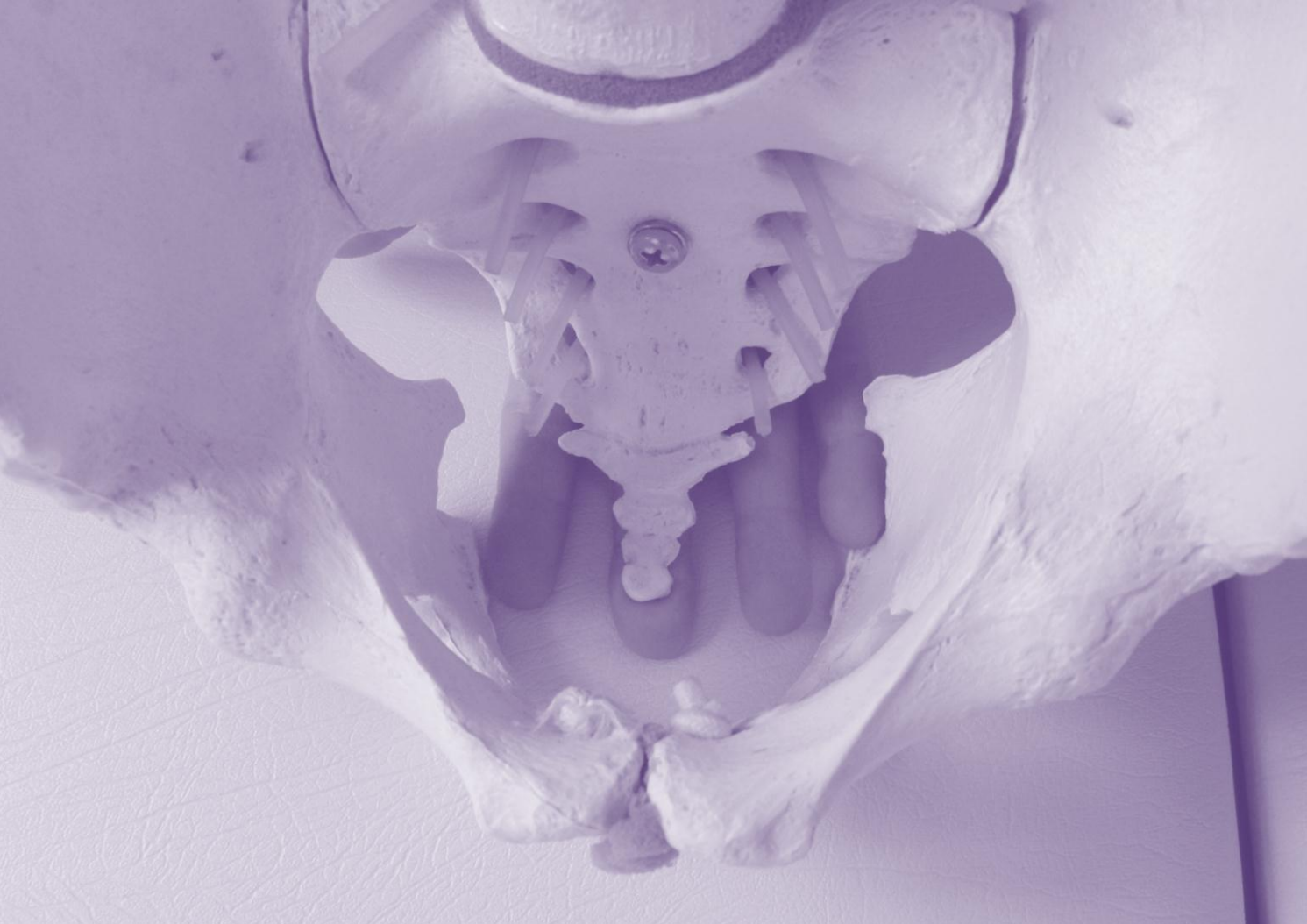




External correction of the coccyx bone

- A case study-

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ABSTRACT

Introduction: Coccydynia is often associated with a malalignment of the coccyx and changes in the musculo-visceral system are often found in these patients. Therefore, the writers believe evaluation of the patient's complaints must include assessment of the articular, myofascial and visceral systems. Currently, correction of coccyx malalignment is usually achieved through internal treatment by a pelvic floor therapist; however, this poster presents an external treatment technique that can be performed by manual therapists.

Description: This case study followed a patient with chronic coccydynia from onset of symptoms to three months after the start of the physiotherapy treatment. The outcomes of the assessment, including history of trauma, treatment and follow up, by use of questionnaires and visual analogue scales, is being presented.

Purpose: To present an effective therapeutic tool to manual therapists that is easy to perform and very patient friendly.

Relevance: Chronic coccydynia can greatly impact a patient's daily life.

Evaluation: VAS score was reduced by 50% after the first treatment session and at three weeks follow-up. At two month follow-up the VAS was reduced and the Québec Back Pain Disability Scale score was reduced by 50% from intake score.

Conclusions: Despite the long-term nature of this patient's coccyx pain, this manual external treatment was effective in relieving symptoms. Manual therapists can use a simple, efficient, external technique to correct coccyx malalignment in patients with coccydynia.

Implications: Effective treatment is still possible after many years of chronic coccydynia

PATIENT

Miss Z., 15 years old, attends middle school. Sports : hockey
5 years of significant pain in her pelvis and lumbar spine. VAS 8.
Quebec score 50/100. Daily use of maximum doses of Paracetamol and Ibuprofen

HISTORY

January 2007, Miss Z. is 10 years old: Fall down the stairs onto coccyx and lower back. Slight nausea, but no other complaints. One month later: onset of symptoms.
GP > poor posture > 12 x training sessions with **therapist** followed. Goal was to improve pelvic control and reduce lumbar lordosis. No improvement, complaints stay the same.

September – November 2009: hockey and swimming too painful > **GP** > lumbar lordosis causes complaints > new training episode > no improvement > **x-ray** taken> innominate height difference > **GP** > bowel disorder causes pain > prescribes **purgatives and orthopedic doctor** > leg length difference >orthotics>no improvement > weekly sessions of painful high velocity thrust **manipulations** followed > no improvement and too much back pain to be active in sports again >maximum doses of **paracetamol and ibuprofen**, no physical activities up to 2012.

November 2011 > **GP** > 12 x **training** for better posture > **no improvement**

EXAMINATION

In 2012 Meine Veldman examined Miss Z. The pain was located bilateral at the base and ILA of the sacrum. The coccyx was malaligned with the caudal aspect deviated to the left and a compensatory left side flexed left rotated sacrum and a C scoliosis of the lumbar spine, convex to the left.

TREATMENT

First treatment (see photos): Patient is sitting on the short side of the table. The patient crosses the arms. The therapist moves the patient's trunk ventrally. The therapist brings phalanx 3 and 4 (or just 3) under the coccyx bone and fixes it.
The therapist left side bends the patient's thoracic spine which shifts the patient's body to the right. The therapist then rotates the patient's thorax to the right.
The patient's body is brought back to starting position and the motion is checked by a repeated side shift to the right with a left side bend of the thoracic spine. The patient is then brought back to starting position and the treatment is finished.

Second treatment: any rotational malpositions of the sacrum are corrected and malalignment of the coccyx is checked.

Third treatment: Hypertonic muscles are relaxed by stretching and/or dry needling.

FOLLOW-UP

After correction of the coccyx using the described treatment, the pain was reduced with the VAS-score to 4/10, after 3 weeks 3/10, after two months 1/10, after three months 0/10. After two months, the Quebec score was 25/100, one month later it was further reduced to 15/100. Immediately after the first treatment, the lumbar spine curvatures appeared to be normal with no C scoliosis noted.

DISCUSSION AND CONCLUSION

Chronic coccydynia can greatly impact a patient's daily life as we can see from this case study. Despite the long-term nature of this patient's coccyx pain, this manual external treatment was effective in relieving her symptoms. Manual therapists can use a simple, efficient, external technique to correct coccyx mal-alignment in patients with coccydynia. Effective treatment is still possible after many years of chronic coccydynia. Further research on this and other techniques is needed in order to find the most effective patient friendly way to alleviate symptoms of this 'pain in the tailbone'.

Biography of Meine Veldman

Meine Veldman (1953) is a Dutch Orthopaedic Manual Therapist. He started his career by treating sport professionals. For the past fifteen years he has owned two private practices in a multicultural part of Utrecht and in Bilthoven, both in the Netherlands. His special interest in treatment of the coccyx bone developed after a coincidental successful treatment of coccydynia in a tennis player. Meine took courses in visceral manipulation and became a specialist in treatment of coccydynia. On average Meine treats 40 persons with coccyx pain every month.

Biography of Cecile Röst

Cecile Röst (1961) is also a Dutch Orthopaedic Manual Therapist. She is the author of 'Relieving Pelvic Pain during and after Pregnancy' and published extensive epidemiologic studies on pelvic pain in Spine (2004) and Acta Obst. Gynaecol. Scand. (2006). Cecile teaches her theories and treatment techniques to colleagues in the Netherlands, Belgium and Canada. Because of the great impact coccydynia can have on daily life and the simple treatment that can successfully improve symptoms and quality of life, Cecile and Meine are cooperating in further research about this topic.

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