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Manipulation therapy in coccydynia

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ABSTRACT

In this paper, use of manipulation therapy in coccydenia is discussed Coccydynia is a term that refers to pain in the region of the coccyx which is typically triggered by or occurs while sitting. The intensity of the pain varies and sometimes is aggravated by arising from position or injecting the painful area with local anesthetic or corticosteroids. In most cases, abnormal mobility is seen on dynamic standing and seated radiographs. The cause of pain is unknown in most of the patients. Non surgical management remain the gold standard treatment for coccydynia, consisting of decreased sitting, seat cushioning, coccygeal massage, stretching, manipulations, local injections of steroids or anesthetics and postural adjustments. In this article we will focus on the use of manipulations to treat the coccydynia.

Keywords: coccydynia, manipulation therapy.

INTRODUCTION

Coccydynia is defined as pain in and around the coccyx. It is a symptom not a diagnosis.[1] coccydynia is pain in the region of the coccyx, typically triggered by or occur while sitting.[1] Apart from those cases caused by local injury the etiology remains obscure. Some rare but well defined pathologies are-

1. Chordoma
2. Gaint cell tumor
3. Intradural schwannoma
4. Perineural cyst
5. Intra- osseous lipoma[2]

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In the majority of cases of coccydynia there are no identifiable causes and these causes are often labeled as idiopathic.[2]

Coccydynia is five times more prevalent in woman than men. Although it can occur over a wide age range mean age of onset is 40yrs.[1]

Patients usually present with in and around the coccyx without significant low back pain or radiating or referred pain.[1] The pain is localized to the sacrococcygeal joint or mobile segment of the coccyx and may relieved by sitting on the leg or either buttock. Chronic pain persists for > 2 months. Patient may feel frequent need to defecate or may have pain with defecation.[3]

The incidence of concomitant low back pain is known to be higher in individuals with coccydynia compared to the general population particularly those with certain anatomic variants such as a coccyx that is curved forward with an apex pointed caudally or straightforward.[3]

Many different treatments have been proposed for coccydynia which includes physical therapy, injections into the inter-coccygeal joint or around

the coccyx, coccygectomy and manual medicine treatment.[4] When manipulation of the coccyx with injection was used in the first instance there was an 85% successful response.[5] Manual Therapy has been an upcoming treatment option for coccydynia. The idea behind manual treatment is that tense muscles can pull the coccyx out of position, causing pain. The treatment aims to relax and extend the muscles, so that the coccyx can return to its normal position.[6]

Most of these involve internal contact with the coccyx, levetor anus and coccygeus massage, joint mobilization with the coccyx in hyperextension stretching the levetor anus and repeated joint mobilization with circumduction of the coccyx performed in out patient clinic or with patients under general anesthesia. [4]

It was thought that the techniques involving a levetor anus stretch would be more effective than massage because the latter is considered to be infective for the other forms of backpain.[4] It was found that the manipulation stretches the ligaments and allows ordinary movements to become painless.[5]

RATIONALE BEHIND THE USE OF MANUAL THERAPY

1. In most cases, the coccyx has deviated toward the anterior, in this case pull firmly posterior.

2. If it deviated right or left, pull into the correction with counter pressure applied externally.

3. Massage across the anterior face of the coccyx and sacrum to improve circulation. This is especially beneficial if "bruising" of the periosteum after childbirth suspect.[7]

PREREQUISITE OF MANUAL THERAPY

Make sure internal adjustments are within scope of practice. Review x-rays of the coccyx area. Explain to the patient what you are going to do. Explain the purpose of the adjustment. The most common purpose is to check for and realign structures, remove inflammation, and stretch and massage ligaments. Get a signed informed consent. Have the patient evacuate bowels and bladder just before the adjustment.[8] After manipulation there is usually local discomfort for a few days but then the symptoms generally subsides.

TECHNIQUE

JB Mennell describe the technique of manupilation that is known as Mennell's Technique. In this, coccyx is grasped between the external thumb and the internal index finger while flexion, extension and rotation are applied. This was followed immediately by treatment with Maigne's technique in which the coccyx is maintained in hyperextension with the index finger applied to the ventral aspect of the inferior sacrum while counter pressure is exerted by the external left hand, the heel of which applies firm and progressively increasing pressure on the superior aspect of the posterior sacral surface. This maneuver places the coccygeal joint in the hyperextension & stretches the levetor anus.[4] The efficacy of manipulation has been reported by several authors. (Duncan 1937, Stern 1967.)

STUDIES

A five-year prospective trial was done by Wary CC, Easom S, Hoskinson J involving 120 patients was undertaken to investigate the etiology and treatment of coccydynia. The cause lies in some localised musculoskeletal abnormality in the coccygeal region. Lumbosacral disc prolapse is not a significant factor. The condition is genuine and distressing and they found no evidence of neurosis in patients. Physiotherapy was of little help in treatment but 60% of patients responded to local injections of corticosteroid and local anesthesia. Manipulation and injection was even more successful and cured about 85% of patients.

Coccygectomy was required in almost 20% and had a success rate of over 90%. [2]

Another study done by Jean Yves Maigne, Gilles Chateller, marie Archmambeaud shows 25% success rate of manipulation in chronic coccydynia.[6]102 patients with CC were enrolled. Non-inclusion criteria were age <25, current depression, work injury, previous manual treatment. Patients were classified in either stable or unstable (luxation or hypermobility) coccyges, according to the results of stress radiographies.The treatment group (M) received 3-4 sessions of intrarectal manipulation combining stretching of Levator ani and coccygeal mobilization. The control group (P) received 3-4 sessions of an external sacral shortwaves therapy at the lowest level, assumed to be a placebo. Assessments took place at 0, 1 and 6 months (these latter by an independent observer).

3 pain questionnaires (McGill, Dallas (modified) and Hotel-Dieu) and the Visual Analog Scale (VAS). Study shows Intrarectal manipulation induces mild improvement of chronic coccydynia.[9]

A Study done by Maigne & Chatellier prospectively compared the levator ani muscle massage, joint mobilization and mild stretching of levator ani, without the addition of injections. At 6 months, successful treatment was found 29% with massage, 16% with mobilization and 32% with stretching.[4]

Contraindications keep in mind while doing manipulation.[10]

1. Endometriosis, 2. pelvic tumors,
3. fractures, 4. cancer

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