
August 2020 Physiotherapy Journal Club
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Nicely done introduction worth reading.

Background: Several interventions are currently used for the management of coccydynia including non-steroidal anti-inflammatory drugs (NSAIDs), hot baths, ring-shaped cushions, intrarectal massage and manipulation, injections, ganglion impar blocks, radiofrequency thermocoagulation (RFT), and psychotherapy. For patients who do not respond to these forms of intervention, coccygectomy is often recommended. Due to the inconsistency and limited success in treating this condition, the purpose of this systematic review was to compare conservative interventions and examine their effectiveness in the management of coccydynia.

Methods: Lit search performed July 2012 using the Cochrane Library, CINAHL, Medline, PEDro, Scopus, and Sports Discus databases. The search strategy used to identify relevant studies was based on the PICO model: population, intervention, comparison, and outcome measures. The population search terms included were coccydynia, coccyx pain, and coccygodynia. The intervention search terms included were intervention, treatment, physical therapy, physiotherapy, therapeutics, manipulation, manual therapy, injection, medication, electrophysical modalities, surgery, and radiofrequency.

Articles published between January 2002 and July 2012 available in English that described treatments for patients of age 18 or older, with a primary diagnosis of coccydynia, were included. Publications were excluded if they described surgical interventions involving the lumbar spine or pelvis, included patients with cancer and/or cysts in the pelvic area, or were case reports. Initial 191 papers, ended up with 7 papers. Papers were reviewed by 6 reviewers. 1 primary and 1 secondary reviewer assigned for each paper and probable grade guided by the GRADE [grading of recommendations, assessment, development, and evaluation] approach, which provides measures of the quality of evidence, as well as the strength of a recommendation for utilizing that intervention in clinical practice. Any grading disagreements among reviewers were discussed and a consensus was reached.

https://training.cochrane.org/grade-approach

Results: only 1 minor disagreement among reviewers resolved by consensus

Demographics Table 2. Age ranges 18-77, % females ranged 37.5% to 88.7%

Causes: either idiopathic or traumatic, Duration of pain ranged from 15 days – 2 years
Diagnosis: patient reported pain, pain on sitting, pain on sit to stand. Tenderness of coccyx, pain with manipulation
Mobility of coccyx: intra-rectal palpation, dynamic radiographs, MRI
Outcome measures: mainly VAS, VNS, NPRS several pain questionnaires (McGill, ) QOL questionnaires, one study measured pain-free sitting time (Khatri manipulation study)
Interventions presented in the studies included: intrarectal manipulation with massage, intrarectal manipulation with phonophoresis, transcutaneous electrical nerve stimulation (TENS), and analgesics, intrarectal manipulation with massage and diathermy, steroid injection, dextrose prolotherapy, chemical neurolysis, and RFT of the ganglion impar.

**Results Table 1 with GRADE evidence profile**

2 RCTs, 5 observational studies. Evidence ranged from Moderate to very low quality.

Recommendations ranged from weak recommendations for use to weak recommendations against use.

First 3 studies: Manual interventions: 3 studies all intrarectal manipulation, 2 combined with TENS or diathermy all reported significant decreases in pain.

Next 3 studies: Injections: 3 studies, all pts failed donut cushions, NSAIDS, and oral analgesics. Ganglion impar steroid injection, CT guided coccyx injection (SC joint?), and dextrose prolotherapy 2/3 reported significant decrease in pain. No sig change with steroid inj.

Last study- RFT – sig improvement in VNS and EQ-D (qol) score.

Discussion: The dearth of papers and their overall low levels of evidence did not allow authors to determine the best conservative intervention option for coccydynia.

- Manipulation studies: problems with studies included reported only mild effectiveness, did not control for analgesics, combination of diathermy and manip

- Injection studies: limited by not showing significant results for steroid injections, not including trauma patients in the prolo study, and failure to standardize interventions in the ganglion impar study.

“Etiology and duration of symptoms appear to be important indicators when determining the appropriate injection for the treatment of coccydynia.”

RFT- small sample size problem

Questions for Discussion:

1. How do you treat coccydynia?
2. How do you assess coccyx mobility?
3. Do you assess for return of the coccyx from a flexed position to resting position? what I call “rebound”