Review Article

Management of coccygodynia: talking points from a systematic review of recent clinical trials

Manuel Giovanni Mazzoleni[1], Nicola Maffulli[2,3,4], Tommaso Bardazzi[1], Michael Memminger[1], Francesca Alzira Bertini[1], Filippo Migliorini[1,5]^

[1]Department of Orthopaedic and Trauma Surgery, Academic Hospital of Bolzano (SABES-ASDAA), Bolzano, Italy; [2]Department of Trauma and Orthopaedic Surgery, Faculty of Medicine and Psychology, University La Sapienza, Roma, Italy; [3]School of Pharmacy and Bioengineering, Keele University Faculty of Medicine, Stoke on Trent, Staffordshire, UK; [4]Centre for Sports and Exercise Medicine, Barts and the London School of Medicine and Dentistry, Mile End Hospital, Queen Mary University of London, London, UK; [5]Department of Life Sciences, Health, and Health Professions, Link Campus University, Rome, Italy

Contributions: (I) Conception and design: F Migliorini, MG Mazzoleni, N Maffulli, M Memminger; (II) Administrative support: T Bardazzi, M Memminger, FA Bertini; (III) Provision of study materials or patients: MG Mazzoleni, F Migliorini; (IV) Collection and assembly of data: F Migliorini, T Bardazzi, FA Bertini; (V) Data analysis and interpretation: F Migliorini, MG Mazzoleni, N Maffulli, M Memminger; (VI) Manuscript writing: All authors; (VII) Final approval of manuscript: All authors.

Correspondence to: Filippo Migliorini, MD, PhD, MBA. Department of Orthopaedic and Trauma Surgery, Academic Hospital of Bolzano (SABES-ASDAA), Via Lorenz Böhler 5, Bolzano, Italy; Department of Life Sciences, Health, and Health Professions, Link Campus University of Rome, Via del Casale di San Pio V, 00165 Rome, Italy. Email: migliorini.md@gmail.com.

Background: Coccygodynia, characterised by localised pain in the coccyx and surrounding tissues, presents challenges in diagnosis and management given its low prevalence and varied aetiology. Traumatic injury, particularly backward falls, is commonly implicated, while non-traumatic causes include degenerative joint disease, overloading stress forces from obesity and morphological variations of the coccyx. Diagnostic evaluation involves medical history, physical examination, and radiographic imaging. While conservative management is often successful, refractory cases necessitate intervention. However, optimal treatment strategies still need to be clarified. The present systematic review discusses the clinical evidence on the management of coccygodynia.

Methods: In December 2024, a systematic review followed PRISMA guidelines, accessing PubMed, Web of Science, and Embase databases. Eligible studies included solely clinical trials investigating coccygodynia management. The risk of bias was assessed using Cochrane risk of bias assessment tool (RoB2) for randomized controlled trials (RCTs) and the Risk of Bias in nonrandomized Studies of Interventions (ROBINS-I) for non-RCTs. Data extraction and statistical analyses followed the recommendations of the Cochrane Handbook for Systematic Reviews of Interventions.

Results: Of 407 identified articles, 16 met inclusion criteria, comprising 858 patients, primarily women. Risk of bias assessment revealed varying methodological quality among included studies. Conservative treatments, including physiotherapy and shockwave therapy, showed promise in pain management. Interventional therapies, such as corticosteroid injections and ganglion-impair blockade, demonstrated efficacy in refractory cases. Surgical interventions, particularly coccygectomy, yielded moderate success rates but were associated with notable risks.

Conclusions: A multidisciplinary approach is advocated for managing coccygodynia, with conservative measures as initial strategies. Physical therapy-based interventions and interventional treatments, such as corticosteroid injections and ganglion impair blockade, offer viable options for refractory cases. Surgical intervention should be considered judiciously, weighing risks and benefits based on patient-specific factors

^ ORCID: 0000-0001-7220-1221.

and treatment response. Further research is needed to establish standardized guidelines for coccygodynia management based on high-quality evidence.

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Introduction

Coccygodynia, or coccygodynia or coccygeal neuralgia, manifests as pain within the coccyx and surrounding tissues, often exacerbated by sitting, standing, or defecation, impairing quality of life and daily activities (1-12). The coccyx, a triangular bone at the lowermost end of the spine, comprises a variable number of rudimentary vertebrae, typically ranging from three to five due following segmental fusion (9,10,13-28), and serves as the attachment site for various pelvic structures. It harbours an extensive nerve supply, including the S4, S5, and coccygeal nerves forming the coccygeal plexus, responsible for sensory and pain innervation of the anterior and posterior aspects of the coccyx (3,29-32).

Coccygodynia is relatively uncommon, with a prevalence estimated at 1–3% among all back pain disorders, occurring more frequently in adult females and obese individuals (25,33-36). Prolonged sitting exacerbates symptoms, with triggers including standing up, defecation, and sexual intercourse (37-41). While the aetiology of coccygodynia remains elusive, traumatic injury, particularly backward falls, is frequently implicated (13,37,42-46). Fractional dislocation of the sacrococcygeal synchondrosis resulting from excessive sitting may induce abnormal coccygeal movement, leading to persistent pain attributed to ligament and muscle inflammation (15,47-49). The less common non-traumatic coccygodynia may arise from various sources, including sacrococcygeal hypo- or hypermobility, degenerative joint or disc disease, morphological variants of the coccyx, childbirth, obesity, rapid weight loss, and infectious aetiologies (25,33,37,50-53).

Diagnostic evaluation typically involves a medical history and physical examination supplemented by radiographic imaging to assess sacrococcygeal region abnormalities (42,54-56). While acute coccygodynia often resolves spontaneously within weeks to months without treatment, refractory cases necessitate intervention primarily to alleviate symptoms. Conservative management, including rest, anti-inflammatory medications, seating aids, stretching, physiotherapy, manipulative therapy, physical therapy, and heat therapy, has demonstrated efficacy in approximately 90% of cases (25,57).

When chronic symptoms persist and significantly affect daily quality of life, interventional treatment options may be considered (58,59). Radial extracorporeal shockwave therapy (rESWT) is a non-invasive alternative for symptom alleviation, leveraging biological responses mediated by mechanotransduction (2,60-63). Steroid and anaesthetic injections have also been proposed as viable alternatives for patients unresponsive to non-invasive therapies; however, there exists controversy regarding the optimal injection site (13,64). Another more invasive treatment is

Highlight box

Key findings

- Coccygodynia should initially be addressed using precise diagnostic evaluations combined with multidisciplinary, conservative management strategies. The study highlights significant heterogeneity among available studies, particularly concerning patient selection (chronic *vs.* post-traumatic cases) and treatment protocols.

What is known and what is new?

- Conservative approaches, including physical therapy and infiltrative treatments, remain the primary therapeutic strategies, while surgical interventions are reserved for refractory cases.
- This study provides a comprehensive, evidence-based summary of the best available clinical evidence, offering updated recommendations for the management of coccygodynia. By critically appraising the literature, it establishes a practical guide to assist physicians in decision-making, particularly concerning physical therapy-based treatments, infiltrative interventions, and surgical options.

What is the implication, and what should change now?

- Accurate diagnosis and multidisciplinary conservative management should be prioritized in the initial approach to coccygodynia. Improved standardization in treatment protocols and patient selection criteria are needed to enhance future research and clinical practice.

the ganglion-impaired block, involving the injection of local anaesthetic and alcohol through the sacrococcygeal disc into the retroperitoneal space, with guidance provided by fluoroscopy or ultrasound (54,65-74). Another strategy for denervation procedures is ultrasound-guided coccygeal nerve radiofrequency ablation (UGCN-RFA) (45,75-77). By applying thermal energy to coccygeal nerve branches, an accessible target given its superficial course between the coccyx and subcutaneous tissue, it offers good therapeutic potential (78). Radiofrequency ablation selectively destroys nerve fibres, transmitting pain signals from the coccyx to the brain and minimising collateral damage to adjacent structures. Surgical intervention, including partial and complete resection of the coccyx, has been proposed as a salvage treatment in coccygodynia refractory to other therapeutic options (4,49,79-85). Although outcomes of surgical interventions generally yield favourable results, the proximity of the surgical site to the anal canal poses challenges for subsequent wound care and necessitates meticulous postoperative management (1,79,86-93).

Based on the high-level evidence, no standardised clinical guidelines for managing coccygodynia are currently available. This study aims to address this gap by formulating good clinical practice recommendations based on a systematic analysis of the most relevant data available in the literature. Given the wide range of interventions described, this review aims to summarise and critically appraise the existing body of evidence, providing physicians with updated, evidence-based guidance for the optimal management of patients with coccydynia. The present systematic review is conducted in accordance with the PRISMA reporting checklist (94) (available at https://aoj.amegroups.com/article/view/10.21037/aoj-24-40/rc).

Methods

Eligibility criteria

All the clinical studies investigating the management of coccygodynia were accessed. Studies included in this review were limited to those published in peer-reviewed journals. Articles written in English, German, Italian, French, and Spanish were considered eligible, reflecting the language proficiency of the authors. Research meeting levels I to IV evidence criteria, as defined by the 2020 Oxford Centre for Evidence-Based Medicine, was also eligible for inclusion (95). Reviews, opinions, letters, unpublished data, editorials and studies without full-text availability were excluded. Animals, *in vitro*, biomechanics, computational, and cadaveric studies were not eligible.

Search strategy

The following algorithm was used for the literature search:

- Problem: coccygodynia;
- Intervention: conservative and surgical management;
- Design: clinical trial.

In December 2024, searches were conducted in PubMed, Web of Science, and Embase without applying additional filters or restricting the time frame. The Medical Subject Headings (MeSH) terms utilized for the database search are detailed in the Appendix 1.

Selection and data collection

The database search was conducted independently by two authors (F.M. and T.B.). All retrieved titles were manually reviewed, and abstracts were examined when deemed relevant. Full texts were accessed for abstracts aligning with the topic of interest. Articles were excluded if their full text was unavailable or inaccessible. Additionally, the reference lists of the full-text articles were cross-checked to identify further eligible studies for inclusion. A third senior author (N.M.) made the final decision in case of the authors' disagreements.

Data items

Data extraction was carried out by two authors (F.M. and M.G.M.). The baseline data collected included the author, year of publication, journal, follow-up duration, number of patients, along with their mean age and body mass index (BMI). All data were organized using Microsoft Office Excel version 16.0 (Microsoft Corporation, Redmond, USA).

Assessment of the risk of bias

The risk of bias in the included studies was assessed according to the Cochrane Handbook for Systematic Reviews of Interventions (96). Two authors (F.M. and T.B.) independently evaluated the risk of bias. For randomized controlled trials (RCTs), the revised risk of bias assessment tool (RoB2) (97,98) was utilized, following the Cochrane methodology (99). The evaluation included the following domains: bias arising from the randomization process, deviations from intended interventions, missing outcome

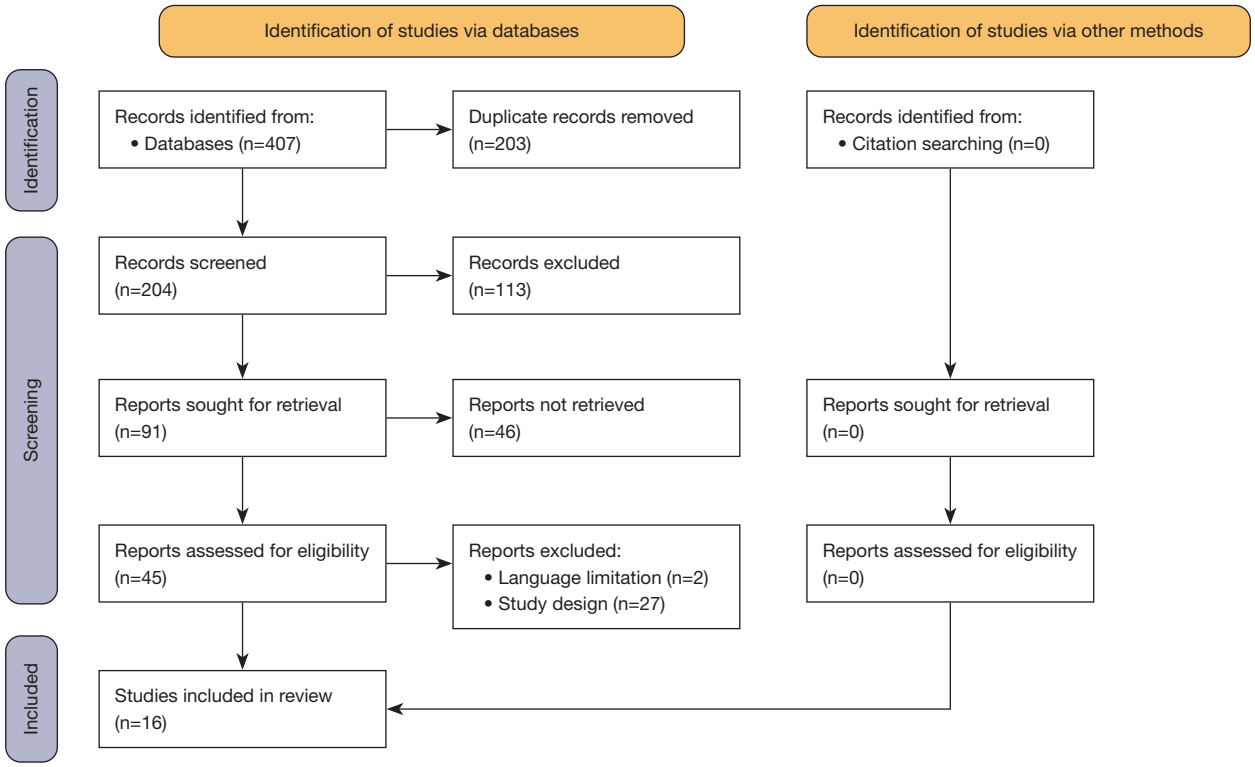

Figure 1 PRISMA flow chart of the literature search.

data, measurement of the outcome, and selection of the reported result. Non-randomized controlled trials (non-RCTs) were assessed using the Risk of Bias in Nonrandomized Studies of Interventions (ROBINS-I) tool (100). Seven domains of potential bias in non-RCTs were evaluated. Two of these domains focus on potential confounding factors and the method of patient selection prior to the commencement of the comparative intervention. Another domain assesses bias in the classification of interventions during the study. The remaining four domains address methodological quality after the intervention comparison, including biases related to deviations from intended interventions, incomplete data, inaccurate outcome measurements, and selective reporting of outcomes. The results from the ROBINS-I assessment were visualized using the Robvis Software (Risk-of-bias Visualization, Riskofbias.info, Bristol, UK) (101).

Synthesis method and statistical analysis

The main author (F.M.) performed the statistical analyses following the recommendations of the Cochrane Handbook for Systematic Reviews of Interventions (96). Descriptive statistics were performed using IBM SPSS software version 25. Continuous data were summarized using the arithmetic mean and standard deviation, while dichotomous variables were reported as frequencies (events/observations).

Results

Study selection

The systematic literature search yielded 407 articles related to the topic of interest. Of these, 203 were excluded as duplicates. The remaining 204 studies were then screened for eligibility. After reviewing the abstracts, 161 articles were excluded because they did not meet the eligibility criteria. The specific reasons for exclusion were as follows: study type and design (n=47), not investigating the management of coccygodynia (n=66), full-text not available (n=46), and language limitations (n=2). Of the remaining 43 articles, another 27 were excluded after accessing the full text. In conclusion, 16 studies were selected in the present systematic review. The results of the literature search are shown in *Figure 1*.

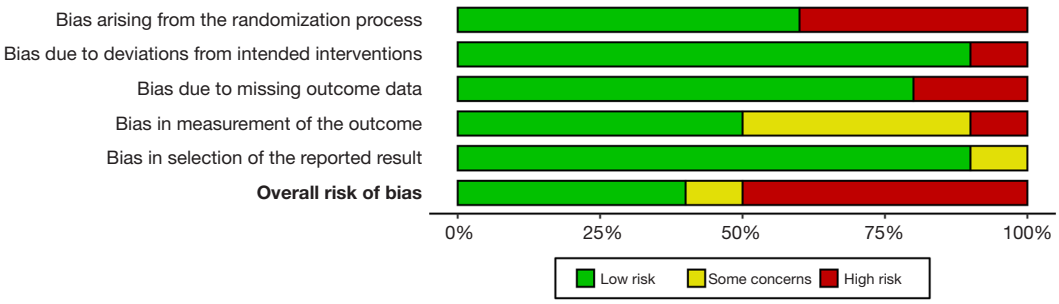

Figure 2 Cochrane risk of bias 2.0 tool (RoB2 tool). RoB2, risk of bias assessment tool.

Risk of bias assessment

In 63% (10 out of 16) of the studies included in this systematic review, the Cochrane RoB2 for RCTs was applied. Five of the included studies demonstrated good comparability between intervention groups at baseline, leading to a low risk of bias from the randomisation process. The remaining four studies raised concerns regarding the randomisation process, resulting in a high risk of bias in this domain. Bias related to deviations from the intended intervention, missing outcome data, and the selection of reported outcomes was occasionally noted, with varying levels of concern, leading to an overall risk of bias ranging from low to high in these domains. In five studies, the absence of assessor blinding resulted in a moderate to high risk of bias in outcome measurement, while the remaining studies exhibited a low to moderate risk in this domain. In conclusion, five studies were assessed as having a low or moderate risk of bias, whereas the remaining five RCTs were rated as having a high risk of bias (*Figure 2*).

The risk of bias for non-RCTs was evaluated using the ROBINS-I tool for 38% (6 of 16) of the included studies, which were non-RCTs. Of these, two were rated as having a severe or critical risk of bias in at least one domain, but no study exhibited a critical risk of bias across all domains. The risk of bias from confounding was moderate in all included studies. The risk of bias in participant selection was low in five studies, while one study had a critical risk in this domain. The risk of bias in intervention classification was predominantly low. Concerns were identified in some studies regarding the measurement of outcomes in post-intervention domains. However, no concerns were raised about the selection of reported results. Overall, the risk of bias was moderate in 67% (4 of 6) of the studies and serious to critical in 33% (2 of 6), suggesting generally acceptable methodological quality (*Figure 3*).

Study characteristics and results of individual studies

Data from 858 patients were retrieved. Of them, 77% (660 of 858 patients) were women. The mean length of follow-up was 10.6±12.0 months. The mean age was 42.9±4.5 years, and the mean BMI was 26.6±3.1 kg/m^2. The generalities of the included studies are shown in *Table 1*.

Discussion

Coccygodynia poses a considerable challenge in clinical practice, particularly given its low incidence and uncertain etiopathogenesis, which often complicates diagnostic and treatment algorithms for clinicians (37). While the existing literature emphasizes initial conservative measures such as rest and sitting aids, persistent or chronic pain remains a primary concern (55,58,59,102,110).

One critical issue in understanding coccygodynia lies in determining the pain's primary origin: whether it stems from trauma, is secondary to other pathologies, or is idiopathic. This delineation represents a significant patient selection bias affecting the existing literature. Based on many pooled patients, previous systematic reviews and meta-analyses have highlighted coccygectomy as the most prevalent treatment modality with the highest success rates. Despite the rigorous research strategy focusing solely on the available evidence, the limited number of RCTs, small sample sizes, variable follow-up durations, heterogeneity among study designs, and heterogeneous treatment modalities preclude formulating a robust pooled strategy. Moreover, limitations of the present investigation, attributable to study design, the number of RCTs included and the overall small sample size, precluded the examination of patient subgroups, such as those with traumatic or idiopathic aetiology, which may significantly impact treatment outcomes. Nevertheless, the present investigation aims to provide clinicians with

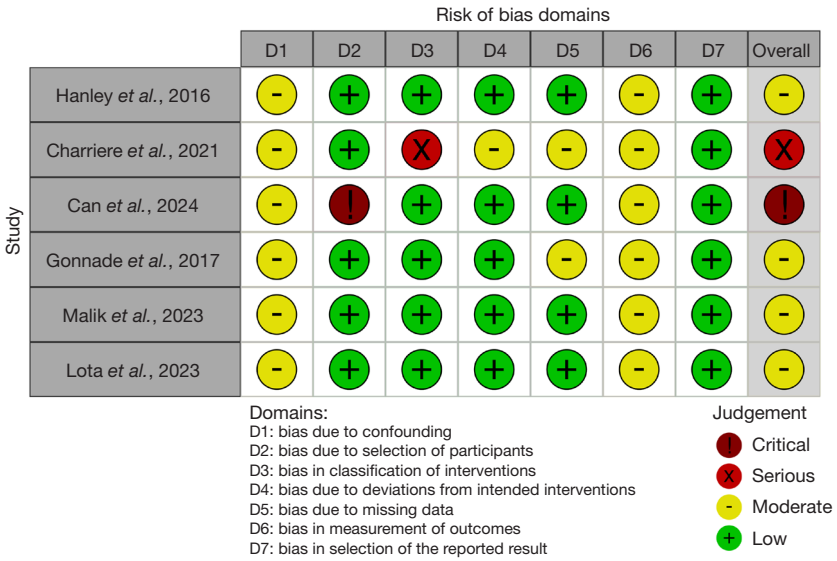

Figure 3 The ROBINS-I of non-RCTs. RCT, randomised controlled trial; ROBINS-I, Risk of Bias in nonrandomized Studies of Interventions.

the best evidence-based recommendations from peer-reviewed clinical trials, emphasizing interventional non-surgical treatments for patients suffering from persistent coccyx pain.

Four RCTs evaluated manual and physiotherapeutic approaches. Notably, one high-quality RCT involving 60 obese patients demonstrated favourable outcomes with an exercise program supplemented with kinesiotaping, indicating improvements in pain, range of motion, and disability at 1-month follow-up (103). However, other than the small sample size, the primary concern of this study is the patient population selected by the definition of coccygodynia induced by obesity, which does not correctly consider the nature of the condition. Other RCTs suggest benefits from piriformis and iliopsoas stretching to correct lumbopelvic posture and alleviate abnormal sacral loading and intrarectal manipulation, albeit with mild effectiveness primarily observed in post-traumatic cases (38,50,109). Conversely, pelvic biofeedback and muscle exercises showed no significant improvement in chronic pain at short to mid-term follow-up. These observations are subject to substantial methodological biases, particularly in randomisation and missing outcome data.

Physical therapy-based interventional treatments emerged as the most extensively studied approach for coccygodynia. Notably, with a low risk of bias, three weekly sessions of rESWT demonstrated superior and longer-lasting efficacy compared to non-image-guided steroid injections at the tip of the coccyx, providing sustained pain relief even at 6 months (107). Furthermore, a pain-adapted rESWT protocol, tailored to individual patient pain tolerance, showed the potential to improve long-term success and recurrence rates, albeit with a moderate risk of bias from clinical management reproducibility and outcome measurement concerns (61). With some concern of bias from the randomisation, rESWT has also proven to be superior in short-term results when compared to focused ESWT and heat muscle relief through local application of shortwave diathermy (SWD) (27.12 MHz frequency) combined with deep electrical stimulation interferential current (IFC) protocols (40 minutes 3 times a week).

Concerning the infiltrative approach, corticosteroid injections at the point of maximum tenderness were efficient for up to 24 weeks, showing no differences when administrated with or without ultrasound guide in recurrent chronic coccygodynia after a first-line treatment through physical and oral therapy (2). Based on the burgeoning body of research surrounding ganglion-impaired (Walther ganglion) blockade, the present investigation underscores a mounting interest in addressing symptomatic treatment by targeting the sympathetic system located in the retroperitoneal space adjacent to the sacrococcygeal joint. Trans-sacrococcygeal and trans-coccygeal fluoroscopic-guided approaches to ganglion-impaired block yielded safe

Table 1 Generalities of the included studies

Author, year (Ref.)	Journal	Design	Follow-up (months)	Treatment	Patients (n)	Women (n)	Mean age (years)	Mean BMI (kg/m^2)	Main findings
Ahadi *et al.*, 2020 (50)	*Basic Clin Neurosci*	RCT	6	Biofeedback & pelvic floor muscle exercises	15	15	41.5	26.7	Biofeedback did not lead to any further improvement in the management of chronic coccygodynia
				Exercises	15	15	35.6	26.4	
Hanley *et al.*, 2016 (79)	*Bone Joint J*	Prospective	24	Coccygectomy	98	87	47.2	27.0	Coccygectomy for chronic coccygodynia results in significant improvement in patient-reported outcomes at 2 years. Failure is associated with certain pre-operative characteristics such as psychiatric illness, poor quality of life features, higher levels of pain, and use of opiates
Ahadi *et al.*, 2022 (2)	*Arch Bone Jt Surg*	RCT	6	Ultrasound guided corticosteroid injection	15	15	44.2	26.4	The ultrasound-guided technique is not associated with an improvement of the outcome compared to the blind injection
				Blind corticosteroid injection	15	15	42.5	27.0	
Charrière *et al.*, 2021 (102)	*Eur Spine J*	Prospective	36	Conservative	115	89	43.5	25.4	In adults with chronic coccygodynia receiving conservative treatment, symptoms decrease overtime, but significantly persist at 36 months in more than half of them. For patients with posterior coccyx dislocation, coccygectomy may be considered rapidly
Abdel-Aal *et al.*, 2020 (103)	*Clin Rehabil*	RCT	1	Kinesiotaping & exercise program	30	11	52.9	35.9	Experimental kinesiotape intervention and exercise program provided significant improvements in pain, range of motion, and disability. It is suggested as an adjunctive therapy in treating obese patients with coccygodynia
				Sham	30	9	51.9	35.2	
Mohanty *et al.*, 2017 (38)	*J Bodyw Mov Ther*	RCT	1	Piriformis & iliopsoas stretching	16	11	–	–	Significant improvement in pain pressure threshold and pain free sitting in both the experimental groups with treatment
				Stretching & Maitland's rhythmic oscillatory thoracic mobilization	16	11	–	–	
				Seat cushioning & sitz bath & phonophoresis	16	12	–	–	
Can *et al.*, 2024 (104)	*J Ultrasound Med*	Prospective	3	Ultrasound guided coccygeal nerve Radiofrequency ablation and steroid injection	32	26	42.4	–	US-guided steroid injection and RFA of the coccygeal nerve for chronic coccygodynia significantly improved pain and function scores at weeks 1, 4, and 12. RFA also results in a lower rate of adverse events
Gonnade *et al.*, 2017 (54)	*Indian J Radiol Imaging*	Prospective	6	Ganglion impar block	31	17	42.9	–	Recommendation of the transsacrococcygeal "needle inside needle" technique for local anesthetic block of the ganglion impar in coccygodynia. Integration with other rehabilitative measures may be needed for prolonging pain free period
Malhotra *et al.*, 2021 (105)	*J Anaesthesiol Clin Pharmacol*	RCT	3	Transsacrococcygeal approach Ganglion impar block	20	14	43.0	–	Both approaches are safe and effective. Trans-coccygeal ganglion Impar block through the first intra-coccygeal joint is better in terms of improvement in pain score, functional disability, patient satisfaction and ease of administration
				Transcoccygeal approach ganglion impar block	20	16	37.7	–	
Malik *et al.*, 2023 (67)	*J Ayub Med Coll Abbottabad*	Prospective	6	Ganglion impar block	50	22	42.9	–	Ganglion Impar neurolysis is highly effective in the treatment of chronic coccydynia
Sencan *et al.*, 2019 (106)	*Korean J Pain*	RCT	3	Ganglion impar block & corticosteroids	34	28	38.1	26.9	Ganglion impar blockade decreases pain in the treatment of chronic coccygodynia and improve depression. Addition of steroids in a ganglion impar blockade is required for treatment response that should accumulate over a long period of time
				Ganglion impar block	39	35	38.3	25.9	
Ahadi *et al.*, 2022 (107)	*Am J Phys Med Rehabil*	RCT	6	ESWT	17	16	35.9	25.4	ESWT is an effective intervention in patients with coccygodynia and had more long-lasting efficacy than steroid in terms of pain relief over 6 months of observation
				Steroid injection	17	15	36.9	26.3	
Lin *et al.*, 2015 (63)	*PLoS One*	RCT	2	ESWT	20	15	44.8	24.2	ESWT is more effective and satisfactory in reducing discomfort and disability caused by coccygodynia than the use of physical modalities
				SWD & IFC	21	15	44.5	22.5	
Lota *et al.*, 2023 (61)	*Ann Med Surg*	Prospective	12	Radial ESWT	14	9	33.6	–	High success rate of ESWT
Şah *et al.*, 2023 (108)	*Turk J Phys Med Rehabil*	RCT	3	Focused extracorporeal shock wave therapy	20	15	35.9	26.2	Radial and focused ESWT are both effective in treating coccygodynia compared to sham ESWT. However, radial ESWT may be more effective in the treatment of coccygodynia
				Radial extracorporeal shock wave	20	18	35.9	26.2	
				Sham	20	17	35.9	26.2	
Maigne *et al.*, 2006 (109)	*Spine (Phila Pa 1976)*	RCT	6	Intrarectal manipulation	51	46	45.2	24.4	Mild effectiveness of intrarectal manipulation in chronic coccygodynia
				Physiotherapy	51	46	44.6	24.5	

BMI, body mass index; US, ultrasound; RFA, radiofrequency ablation; RCT, randomized controlled trial; ESWT, extracorporeal shockwave therapy; SWD, shortwave diathermy; IFC, interferential current.

and effective outcomes, with excellent patient satisfaction immediately post-procedure. At the same time, the administration technique showed questionable better results and ease of administration through the first intra-coccygeal joint (105); adding steroids (40 mg of methylprednisolone) to local anaesthetic was crucial for the prolonged efficacy of the block (106), with various combinations utilized across studies. The most commonly used local anaesthetic was 3 to 8 mL of 0.5% bupivacaine (54,105,106), while one non-randomized study used 1% lidocaine followed by 5 mL of 99% absolute alcohol (67).

Since the critical risk of bias emerged from the assessment of the only study proposing coccygeal nerve radiofrequency ablation, caution is warranted concerning this approach (104).

Steroid blocks are generally not administered without prior unsuccessful attempts at conservative treatment, mirroring the approach whereby surgical intervention is reserved for patients unresponsive to prior interventional treatment strategies. Notably, all the conservative treatments proposed in the studies examined in the present systematic review excluded patients with radiographic evidence of sacrococcygeal dislocation, in whom surgical intervention should be considered. However, one notable exception is the observational study by Charrière *et al.* (102), which revealed a long-term unfavourable outcome in patients treated conservatively for posterior coccyx dislocations despite the severe risk of bias.

A prior systematic review (110) discussed surgery as the best-validated outcome, but the present study focuses solely on clinical trials. This decision was rooted in the recognition that the validity of any analysis hinges on the quantity and quality of the included evidence, which can vary significantly among studies. The sole study focusing on surgical coccygectomy (79) included in the present systematic review was a non-randomised prospective observational study characterised by a moderate risk of bias. This study involved the complete removal of the entire coccyx as the last-line treatment in 94 patients suffering from chronic (lasting more than 1 year) and severe symptoms resistant to conservative treatments such as nonsteroidal anti-inflammatory drugs (NSAIDs) or at least one sacrococcygeal injection. These patients also met the inclusion criteria by presenting radiographic evidence of coccygeal abnormalities, as outlined by Maigne *et al.* (33,49,111). Despite the absence of a control group, preventing the comparison of improvement with continued non-operative care, coccygectomy demonstrated a moderate success rate, with 70.4% of patients meeting the designated minimal clinically important difference (MCID) threshold. However, this intervention carried substantial risks of wound healing complications, albeit without significantly impacting the overall outcome. On the other hand, surgical failure was linked to pre-existing psychiatric conditions, lower quality of life, higher pain levels, and the use of opioids. This highlights the significance of careful patient selection and thorough pre-operative assessment in predicting the likelihood of successful treatment outcomes.

Conclusions

A multidisciplinary approach is advocated for coccygodynia management, with conservative measures as initial strategies. Physical therapy-based interventions and interventional treatments, such as corticosteroid injections and ganglion impair blockade, offer viable options for refractory cases. Surgical intervention should be considered judiciously, weighing risks and benefits based on patient-specific factors and treatment response. Further research and high-quality RCTs are needed to establish standardised guidelines and management protocols for coccygodynia management based on high-quality evidence.

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Footnote

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Ethical Statement: The authors are accountable for all

aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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