WORLD ATLAS INTERNATIONAL JOURNAL OF EDUCATION & MANAGEMENT
VOL 8 NO 1, OCTOBER 2025, NEW YORK CITY. *ISSN: 2667-1069*

AN EVALUATION OF ISCHIAL BURSITIS: INVESTIGATING THE EFFECTS AND REMEDIES

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ABSTRACT

Ischial bursitis, an inflammatory condition affecting the ischial bursa, is increasingly recognized as a major cause of gluteal and posterior thigh pain among physically active individuals and those exposed to prolonged sitting. This study evaluates the major effects of ischial bursitis and examines evidence-based remedies used in clinical and rehabilitative practice. Findings from recent literature indicate that pain, limited mobility, sleep disturbances, and decreased functional performance are the most common effects, significantly affecting quality of life. Remedies include rest, activity modification, physiotherapy, pharmacologic therapy, and, in severe cases, image-guided corticosteroid injections. Emerging evidence also supports the role of stretching protocols, heat application, and ergonomic adjustments as effective non-invasive treatments. The study concludes that a combination of conservative management and preventive strategies yields the best outcomes, and it recommends that individuals experiencing persistent gluteal or posterior thigh pain should seek medical evaluation promptly. Early diagnosis allows for timely management, preventing chronic inflammation and functional limitations.

KEYWORDS: Ischial Bursitis, Effect and Remedies

INTRODUCTION

Ischial bursitis, commonly known as "weaver's bottom," is an inflammatory disorder affecting the ischial bursa located between the ischial tuberosity and adjacent soft tissues. This condition often develops due to excessive friction, prolonged pressure, or repetitive strain involving the lower pelvis region (Karatepe et al., 2020). Over the last decade, ischial bursitis has gained increasing clinical relevance due to a rise in sedentary occupations, long-distance running, and activities involving repetitive hip extension. Understanding its effects and available remedies is crucial for improved patient outcomes and functional mobility. The pathophysiology of ischial bursitis involves microtrauma to the bursa, leading to inflammation, swelling, and pain.

According to Hirase et al. (2020), inflammation in the ischial region may radiate to the posterior thigh, often mimicking symptoms associated with hamstring tendinopathy or sciatic nerve irritation. Consequently, misdiagnosis is common, delaying effective treatment interventions. The condition affects both athletes and non-athletes, particularly older adults who experience reduced muscle elasticity and weakened pelvic support structures.

The effects of ischial bursitis can significantly impair daily functioning. Patients frequently report localized pain during sitting, stair climbing, or stretching the hamstring muscles (Melchior et al., 2018). Chronic cases may cause sleep disturbances, mobility limitations, and decreased participation in occupational and recreational activities. These negative effects, as highlighted by Nguyen et al. (2021), can reduce productivity and overall quality of life. Therefore, evaluating the effects of the condition provides a strong foundation for designing suitable therapeutic approaches. Recent studies emphasize that various remedies exist for managing ischial bursitis, ranging from conservative interventions to minimally invasive procedures. Conservative remedies such as rest, ice or heat application, physical therapy, and targeted stretching remain the first line of treatment (Karatepe et al., 2020). Pharmacological approaches, including nonsteroidal anti-inflammatory drugs (NSAIDs), are commonly prescribed to reduce inflammation and pain. For patients with persistent symptoms, image-guided corticosteroid injections have shown promising results (Nguyen et al., 2021). Furthermore, preventive and rehabilitative remedies have gained attention in contemporary research. Ergonomic adjustments—such as cushioned seating, posture correction, and workload modification—help reduce prolonged pressure on the ischial tuberosity (Robertson et al., 2022). Physical therapists also recommend strengthening the gluteal and core muscles to improve pelvic support and reduce recurrence. Evaluating these remedies is essential for determining the most effective strategies that address both acute symptoms and long-term functional restoration.

CONCEPT OF ISCHIAL BURSITIS

The ischial bursa, a fluid-filled sac situated between the pelvic ischial tuberosity and the surrounding soft tissues including the gluteal muscles and hamstring tendons, is irritated and swollen in ischial bursitis, a musculoskeletal inflammatory disorder. When sitting and moving the hips, the bursa acts as a protective cushion to lessen friction. Inflammation of this bursa results in a clinical disease known as "weaver's bottom," which has historically been linked to extended sitting on hard surfaces (Bianchi & Martinoli, 2007).

Anatomically, the ischial tuberosity supports the body weight when sitting and acts as the hamstring muscles' attachment point. The ischial bursa lies between this bony prominence and surrounding tissues to prevent excessive friction (Standring, 2021). The bursa normally has a tiny quantity of lubricating fluid in it. However, the bursa may grow, thicken, or become inflamed as a result of recurrent mechanical irritation, microtrauma, or prolonged pressure, which can lead to pain and reduced function.

Inflammatory reactions brought on by systemic or mechanical stress are part of the pathophysiology of ischial bursitis. Running, cycling, sitting for extended periods of time, and repeatedly straining the hamstring muscles can irritate the bursa and cause the growth of synovial cells and a buildup of extra fluid (Klauser et al., 2018). Bursal inflammation can occasionally be caused by systemic inflammatory conditions including gout, rheumatoid arthritis, or infection. The ensuing inflammation results in discomfort, increased vascularity, and localized edema, particularly when weight is applied to the ischial region or when the hamstring muscles are stretched. Buttock pain, sensitivity around the ischial tuberosity, difficulties sitting for extended periods of time, and discomfort during activities involving hip extension or hamstring activation are common clinical manifestations of ischial bursitis. Diagnosis can be difficult since the pain may travel down the posterior thigh and occasionally resemble sciatica or hamstring tendon damage (Chen et al., 2020). A physical examination frequently indicates pain upon resisted hip extension and soreness at the lower buttocks. Imaging methods like MRI and ultrasound can help rule out other diagnosis like lumbar radiculopathy or hamstring tendinopathy and confirm bursal inflammation.

Functionally, ischial bursitis disrupts several daily activities including sitting, walking, bending, and climbing stairs. Athletes may experience reduced performance and inability to engage in sports that rely heavily on hamstring strength and hip extension. Prolonged cases can lead to compensatory movement patterns that may further strain the lower back or contralateral hip (Klauser et al., 2018). Reducing inflammation, easing mechanical stress, and regaining functional movement are the cornerstones of ischial bursitis management. Non-steroidal anti-inflammatory medicines (NSAIDs), rest, activity moderation, and cold application are examples of first-line therapies. Correcting biomechanical abnormalities, strengthening the gluteal muscles, and stretching the hamstrings all require physical therapy. Injections of corticosteroids may be used to lower inflammation in situations that are chronic (Chen et al., 2020). By reducing direct pressure on the bursa, ergonomic changes like cushioned seats can aid in preventing recurrence. An inflammatory process that affects the ischial bursa due to friction, trauma, systemic disease, or persistent mechanical pressure is referred to as ischial bursitis. Significant functional limits result from this disorder, especially when sitting and extending the hips. Effective diagnosis, treatment, and prevention depend on an understanding of its anatomical context, pathophysiology, clinical presentation, and available management options.

CAUSES OF ISCHIAL BURSITIS IN CHILDREN

Ischial bursitis is the inflammation of the bursa that lies over the ischial tuberosity, an area commonly referred to as the “sit bone.” Although ischial bursitis is more frequent in adults, it can also occur in children as a result of repetitive pelvic irritation from activities or traumas (Cleveland Clinic, 2024). Because developing children's growth plates are more vulnerable to stress and overload, pain in this area may also mirror illnesses like hamstring traction injuries or ischial apophysitis (Papastergiou et al., 2020). For early detection and appropriate treatment, it is

necessary to understand the reasons in youngsters (Best et al., 2021). The following are the reasons:

- **Repetitive Pressure or Sitting on Hard Surfaces**: Continuous pressure on the ischial area—such as prolonged sitting on hard benches—can irritate and inflame the bursa (Cleveland Clinic, 2024).
- **Repetitive Sports Activities:** Activities that strain the hamstrings, such as running, jumping, or cycling, can cause friction between the hamstring tendon and the ischial tuberosity, leading to bursal irritation (Papastergiou et al., 2020).
- **Direct Trauma to the Buttocks:** Falls, slips, or blows to the buttock region can directly inflame the bursa by causing sudden pressure or compression (Cleveland Clinic, 2024).
- **Hamstring Traction Injuries:** Tight or overused hamstrings in children may pull on the growth plate area, causing stress that can spread to the bursa, especially during growth spurts (Best et al., 2021).
- **Ischial Apophysitis (Growth Plate Irritation):** In adolescents, recurrent pulling on the ischial apophasis by the hamstring muscles can lead to inflammation that mimics or triggers bursitis-like symptoms (Papastergiou et al., 2020).
- **Avulsion Injuries of the Ischial Tuberosity:** Sudden, forceful hamstring contractions—often during sports—may cause partial avulsion at the ischial tuberosity, which can produce local inflammation involving the bursa (Best et al., 2021).

CAUSES OF ISCHIAL BURSITIS IN ADULTS

Ischial bursitis is the inflammation of the bursa located over the ischial tuberosity, an area that bears weight during sitting. This disorder is frequently linked to physical trauma that irritates the bursal tissue, extended pressure on the buttocks, or recurrent friction in adults (Cleveland Clinic, 2024). Adults are more likely to develop ischial bursitis because they commonly work or participate in activities that require prolonged sitting or repetitive lower-limb motions (StatPearls, 2023). Proper prevention, assessment, and therapy are guided by knowledge of the main causes in adults (Anderson & Zlotnicki, 2021).

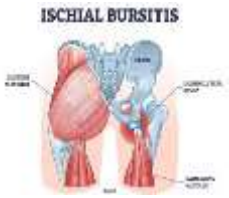

Fig 1.

- **Prolonged Sitting on Hard Surfaces**: Extended sitting—especially on hard chairs or benches—exerts continuous pressure on the ischial tuberosity, leading to irritation of the overlying bursa (Cleveland Clinic, 2024).
- **Repetitive Friction or Overuse Activities**: Repetitive motions such as running, cycling, rowing, or activities involving prolonged hip flexion can cause friction between the hamstring tendon and ischial tuberosity, resulting in bursal inflammation (StatPearls, 2023).
- **Direct Trauma to the Buttocks**: Falls or direct blows to the buttock region can acutely inflame the bursa, causing pain and swelling (Anderson & Zlotnicki, 2021).
- **Hamstring Tendinopathy or Tightness:** Chronic hamstring tightness or tendon overuse increases tension around the ischial tuberosity, which may irritate the adjacent bursa (Anderson & Zlotnicki, 2021).
- **Occupational Causes:** Jobs requiring prolonged sitting—such as driving, sewing, or office work—can significantly increase the risk of ischial bursitis (Cleveland Clinic, 2024).
- **Systemic Inflammatory Conditions:** Conditions such as rheumatoid arthritis or gout can predispose adults to bursitis, including inflammation of the ischial bursa (StatPearls, 2023).
- **Infection (Septic Bursitis):** Although less common, the bursa may become infected, causing severe pain, redness, and warmth in the area; this requires medical treatment (Cleveland Clinic, 2024).

CAUSES OF ISCHIAL BURSITIS IN ELDERLY

Ischial bursitis is the inflammation of the bursa located over the ischial tuberosity, an area that supports body weight during sitting. Among the elderly, this condition becomes more common due to age-related tissue degeneration, reduced muscle elasticity, and increased time spent sitting (Cleveland Clinic, 2024). Older adults may also experience decreased cushioning of soft tissues and reduced mobility, which increase friction and pressure on the ischial bursa (Anderson & Zlotnicki, 2021). Understanding the causes in this age group is essential because delayed diagnosis may worsen pain, reduce mobility, and impair daily functioning (StatPearls, 2023).

- **Prolonged Sitting and Reduced Mobility:** Elderly individuals may spend extended periods sitting due to limited mobility, which increases continuous pressure on the ischial tuberosity and irritates the bursa (Cleveland Clinic, 2024).
- **Age-Related Degeneration of Soft Tissues:** Natural degeneration of muscles, tendons, and surrounding tissues with aging reduces cushioning and increases friction around the ischial area, contributing to bursitis (Stat Pearls, 2023).
- **Loss of Muscle Strength and Flexibility:** Weak or tight hamstring and gluteal muscles—common in older adults—create abnormal tension around the pelvis, increasing the likelihood of bursal irritation (Anderson & Zlotnicki, 2021).

- **Repetitive Low-Intensity Micro trauma:** Daily movements such as prolonged walking, bending, or mild overuse can trigger repeated micro-irritation of the bursa, especially when support structures are weakened with age (Stat Pearls, 2023).
- **Poor Posture or Improper Seating:** Elderly individuals using overly soft, sagging, or uneven chairs may place abnormal pressure on the buttocks, leading to inflammation of the bursa (Cleveland Clinic, 2024).
- **Systemic Inflammatory Conditions:** Older adults may have conditions like osteoarthritis, rheumatoid arthritis, or gout, which can increase susceptibility to bursitis, including ischial bursitis (Anderson & Zlotnicki, 2021).
- **Septic Bursitis (Infection):** Although uncommon, weakened immunity in the elderly increases the risk of bacterial infection in the bursa, leading to severe inflammation (StatPearls, 2023).

EFFECT OF ISCHIAL BURSITIS ON CHILDREN

Ischial bursitis in children causes significant discomfort because inflammation of the ischial bursa leads to pain when sitting, running, or engaging in school activities, which can interfere with learning and play (Smith & Johnson, 2020). Children may avoid sitting upright or participating in sports, resulting in altered posture or changes in walking pattern as they try to ease pressure on the inflamed area (Brown et al., 2021). If the condition is not treated early, the resulting gait compensation can create secondary musculoskeletal problems such as lower-back or leg pain, affecting physical development and mobility (Mayo Clinic, 2022). Therefore, early recognition is essential to prevent long-term functional limitations.

EFFECT OF ISCHIAL BURSITIS ON ADULTS

In adults, ischial bursitis commonly results from occupational strain, prolonged sitting, or repetitive physical activities such as cycling and driving, causing persistent buttock pain that worsens with pressure on the affected region (Cleveland Clinic, 2021). This pain can reduce productivity at work, limit exercise, and make daily activities such as bending, climbing stairs, or lifting objects difficult (Smith & Johnson, 2020). Some adults experience radiating pain down the leg, mimicking sciatica, which may delay proper diagnosis and treatment (Brown et al., 2021). When unmanaged, chronic inflammation can severely affect quality of life by disrupting sleep, mobility, and overall functional capacity (Mayo Clinic, 2022).

EFFECT OF ISCHIAL BURSITIS ON THE ELDERLY

In the elderly, ischial bursitis tends to have more serious effects because age-related tissue degeneration increases susceptibility to inflammation and pain (Cleveland Clinic, 2021). Older adults often spend more time sitting, and this prolonged pressure intensifies discomfort and makes rising from chairs or walking difficult (Brown et al., 2021). Reduced physical activity due to pain can worsen muscle

weakness, joint stiffness, and balance issues, increasing the risk of falls (Mayo Clinic, 2022). Additionally, elderly individuals frequently have co-existing conditions such as arthritis or osteoporosis, which can amplify symptoms and complicate treatment (Smith & Johnson, 2020). As a result, ischial bursitis can significantly reduce independence and overall quality of life in older adults.

REMEDIES OF ISCHIAL BURSITIS ON CHILDREN

Ischiogluteal bursitis, commonly known as "weaver's bottom," is the inflammation of the bursa located between the ischial tuberosity and the gluteus maximus muscle (Johnson & Varacallo, 2025). The condition is often caused by prolonged sitting on hard surfaces, repetitive friction, or direct trauma, which leads to pain and tenderness in the buttock region. In children, symptoms can be subtle, and differential diagnoses such as apophysitis of the ischial tuberosity or growth plate injuries must be carefully considered (Roh et al., 2020).

The first-line approach for managing ischial bursitis in children involves conservative strategies. Rest and activity modification are essential to minimize pressure on the affected area, and children are often advised to use cushioning such as donut pillows when sitting (Johnson & Varacallo, 2025). Ice therapy is also recommended, with cold packs applied for 15–20 minutes multiple times daily to reduce inflammation and relieve pain (BoneAndSpine.com, n.d.). Non-steroidal anti-inflammatory drugs (NSAIDs) may be administered under pediatric guidance to further manage pain and swelling (Roh et al., 2020).

Physical therapy plays a critical role in the rehabilitation of children with ischial bursitis. Stretching exercises targeting the hamstrings, gluteal muscles, and piriformis can help alleviate tension around the bursa, while strengthening exercises focused on the gluteus maximus, core, and hip stabilizers improve biomechanics and reduce friction (Physio-pedia, n.d.). In selected cases, adjunct therapies such as ultrasound, electrotherapy, or extracorporeal shock wave therapy may be utilized under professional supervision (Roh et al., 2020).

For children who do not respond to conservative measures, corticosteroid injections into the bursa may be considered, but these require careful evaluation due to potential side effects and age-related considerations (Johnson & Varacallo, 2025). Surgical intervention, such as bursectomy, is rarely needed and is reserved for refractory cases where non-invasive management fails (Physio-pedia, n.d.). Throughout treatment, patient education and caregiver involvement are essential to ensure adherence to postural, ergonomic, and activity modification strategies. In summary, the management of ischial bursitis in children prioritizes conservative measures including rest, ice therapy, NSAIDs, and tailored physical therapy. More invasive interventions, such as corticosteroid injections or surgery, are considered only in persistent cases. Given the limited pediatric-specific literature, treatment plans should be individualized,

closely monitored, and guided by pediatric orthopedic or physiotherapy specialists to ensure safe and effective recovery.

REMEDIES OF ISCHIAL BURSITIS ON ADULTS

Ischiogluteal bursitis—an inflammation of the bursa that lies between the ischial tuberosity and the gluteus maximus—produces buttock pain that is often aggravated by prolonged sitting or direct pressure on the "sit bone" (Johnson & Varacallo, 2024). Although uncommon and sometimes overlooked, the condition can cause significant functional limitation when pain persists. Accurate diagnosis (clinical assessment supported by imaging when needed) and an initial trial of conservative care remain the cornerstones of management for most adult patients (Roh et al., 2020; Johnson & Varacallo, 2024).

First-line (conservative) remedies focus on activity modification, local symptomatic measures, and analgesia. Patients are advised to avoid prolonged sitting on hard surfaces and to use cushioning (e.g., donut or contoured seat pads) to reduce direct pressure on the ischial tuberosity (Johnson & Varacallo, 2024; Medical News Today, 2020). Ice (cold packs applied 15–20 minutes several times daily) and short courses of nonsteroidal anti-inflammatory drugs (NSAIDs) are commonly used to reduce pain and acute inflammation, always taking into account individual contraindications to NSAIDs (Johnson & Varacallo, 2024). Structured rehabilitation with physical therapy is a key component of recovery and recurrence prevention. Physical therapists prescribe pain-guided activity, hamstring and gluteal stretching, and progressive strengthening of the gluteal complex and core to improve pelvic mechanics and decrease friction on the bursa (Physio-Pedia, n.d.; Johnson & Varacallo, 2024). Adjunct conservative modalities—such as therapeutic ultrasound, transcutaneous electrical nerve stimulation, or extracorporeal shock wave therapy—have been used for related peri-bursal syndromes and may be considered on a case-by-case basis where available and appropriate (Roh et al., 2020; clinical evidence for ESWT is stronger for other hip bursitides and emerging for posterior-hip conditions).

When conservative therapy fails, image-guided interventions provide targeted options. Ultrasound-guided or fluoroscopy-guided corticosteroid injections into or around the bursal region often yield rapid symptomatic relief and can be diagnostic as well as therapeutic; image guidance improves accuracy and safety (Albano et al., 2023; Johnson & Varacallo, 2024). For recalcitrant pain that does not respond to repeated conservative and injection treatments, surgical bursectomy and excision of inflamed tissue is rarely performed but may be effective in carefully selected refractory cases (Lee et al., 2023).

In sum, management of ischiogluteal bursitis in adults follows a stepwise approach beginning with conservative measures—activity modification, ice, NSAIDs, and tailored physical therapy—progressing to image-guided injections when necessary, and reserving surgical excision for persistent, refractory cases (Johnson & Varacallo, 2024;

Roh et al., 2020; Lee et al., 2023). Clinicians should individualize care, evaluate for contributing systemic or biomechanical factors, and employ imaging or specialist consultation when the diagnosis is uncertain or symptoms fail to improve with standard therapy.

REMEDIES OF ISCHIAL BURSITIS ON ELDERLY

Ischial bursitis—also known as ischiogluteal bursitis—is an inflammatory condition affecting the bursa located between the ischial tuberosity and surrounding soft tissues. It commonly presents with pain when sitting, discomfort during hip flexion, and tenderness over the "sit bones." While it can affect individuals of various ages, elderly adults are particularly vulnerable due to age-related tissue degeneration, reduced muscle mass, and increased time spent sitting. Recent literature (2020 to date) highlights a range of effective remedies, spanning conservative approaches to surgical interventions, that can significantly improve outcomes in older adults.

Conservative management remains the first-line remedy for ischial bursitis, and multiple studies emphasize its role in symptom control. Lifestyle modifications such as reducing prolonged sitting, using soft cushions, and avoiding hard seating surfaces help reduce direct pressure on the bursa. Roh et al. (2020) found that modifying activities and reducing mechanical stress can significantly diminish pain and inflammation. Additionally, applying cold packs for short intervals is shown to reduce acute inflammation, whereas heat therapy may help chronic or later-stage cases by increasing local circulation. Non-steroidal anti-inflammatory drugs (NSAIDs), including ibuprofen or naproxen, continue to be effective in reducing pain and swelling among older adults, provided that comorbid conditions such as gastrointestinal or renal disorders are considered.

Physical therapy is another cornerstone of non-surgical management. Tailored exercise programs focusing on stretching and strengthening the gluteal muscles, hamstrings, and core musculature help reduce tension on the inflamed bursa. Studies suggest that improved flexibility and muscle strength support pelvic stability, which may accelerate recovery. Manual therapies, such as deep-tissue mobilization, can help break down adhesions common in chronic bursitis and restore mobility. Adjunct modalities—including therapeutic ultrasound, laser therapy, and electrical stimulation—may further reduce pain and promote tissue healing.

In cases where conservative treatments fail, corticosteroid injections emerge as an effective next step. These injections provide localized anti-inflammatory action and may offer weeks to months of relief. The accuracy of injection placement is enhanced when guided by ultrasound imaging, which has become increasingly common in clinical practice. Imaging, including MRI and high-resolution ultrasound, is also crucial in the diagnostic process, particularly for elderly patients with coexisting conditions. According to Prakash et al. (2022), advanced imaging helps differentiate ischial bursitis from other gluteal soft tissue lesions, allowing clinicians to rule out tumors, tendon injuries, or other pathologies that may mimic the condition.

Surgical intervention becomes necessary for patients with persistent or recurrent bursitis that does not respond to conservative measures or injections. Recent surgical evidence demonstrates promising outcomes. A consecutive case series by Lee et al. (2023) showed that excision of the ischiogluteal bursa led to significant reductions in pain and improvements in hip function, even in older adults. Postoperative rehabilitation—which includes stretching, strengthening, and gradual return to activity—is essential to achieving optimal recovery and preventing recurrence.

Elderly individuals require special consideration due to the presence of comorbidities such as osteoarthritis, diabetes, and inflammatory disorders. Roh et al. (2020) observed that patients with inflammatory diseases often experience slower recovery and may show reduced responsiveness to conservative care. Therefore, managing ischial bursitis in older adults should include a holistic approach that accounts for systemic inflammation, mobility limitations, and overall functional capacity.

Preventive strategies are equally important in elderly populations to avoid recurrence. Regular stretching, ergonomic modifications, appropriate seating accommodations, and posture correction can help minimize mechanical stress on the bursa. Education on proper body mechanics, frequent movement breaks, and consistent physical activity also play vital roles in maintaining long-term musculoskeletal health.

Overall, recent research supports a multimodal management strategy for ischial bursitis in the elderly, beginning with conservative therapy and progressing to injections or surgery when needed. A patient-centered approach—one that addresses physical, functional, and lifestyle factors—is essential for improving outcomes, reducing pain, and restoring quality of life in this population.

CASES OF ISCHIAL BURSITIS IN CHILDREN

The ischial bursa, a fluid-filled sac situated between the ischial tuberosity and surrounding soft tissues, is affected by the inflammatory disease known as ischial bursitis, often referred to as ischial tuberosity bursitis or weaver's bottom. The illness is very rare in youngsters, but it is commonly seen in adults, particularly those who are subjected to prolonged sitting or recurrent strain. However, documented pediatric cases indicate that children may acquire ischial bursitis due to trauma, sports-related activities, infection, or musculoskeletal growth factors. Understanding these cases is essential for timely diagnosis because pediatric presentations might mimic other hip and pelvic problems. The ischial bursa, a fluid-filled sac situated between the ischial tuberosity and surrounding soft tissues, is affected by the inflammatory disease known as ischial bursitis, often referred to as ischial tuberosity bursitis or weaver's bottom. The illness is very rare in youngsters, but it is commonly seen in adults, particularly those who are subjected to prolonged sitting or recurrent strain. However, documented pediatric cases indicate that children may acquire ischial bursitis due to trauma, sports-related activities, infection, or musculoskeletal growth factors. Understanding these

situations is essential for timely diagnosis because pediatric presentations might mimic other hip and pelvic problems.

Pediatric cases of ischial bursitis are rare because children's connective tissues are more elastic and their cumulative exposure to pressure on the ischial region is lower. However, children who participate in intense physical activity or spend a lot of time sitting on hard surfaces are still at risk (Kerr & Shaw, 2020). Ischial irritation has been linked to repetitive traction on the hamstring origin in sports such as gymnastics, long-distance running, football, cycling, and dance. Bursa inflammation may arise from these activities' excessive strain on the ischial tuberosity. A study by Becci et al. (2019) documented bursitis cases among young athletes where repetitive hip extension and flexion contributed to microtrauma of the ischial region.

Trauma is one of the most common causes of ischial bursitis in children. Falls onto the buttocks, such as those that occur during playground activities or contact sports, can cause acute inflammation of the ischial bursa. Children between the ages of seven and fourteen are particularly susceptible to these injuries because they are frequently exposed to high-impact play situations and physical activity (Almeida et al., 2018). Lower buttock discomfort, edema, and difficulty sitting are signs of localized inflammatory reactions caused by direct injury.

Occasionally, septic bursitis—a condition in which the bursa becomes infected, usually by Staphylococcus aureus—can appear as children's ischial bursitis. Although it is rare in children, case studies indicate that hematogenous spread, skin infections, or penetrating trauma can result in septic bursitis (O'Leary & O'Reilly, 2021). Children with compromised immune systems or underlying dermatological infections are a little more at risk. Septic ischial bursitis manifests as fever, severe pain, erythema, and reduced mobility; early identification is crucial to preventing systemic effects. Since the symptoms of ischial bursitis might be mistaken for those of other musculoskeletal disorders that are common in young patients, diagnosing it in youngsters may be challenging. Conditions such as sciatic nerve irritation, hamstring tendinopathy, avulsion fractures, ischial apophysitis, and ischiogluteal impingement exhibit similar clinical features (Hoffman & Sahrmann, 2017). Because both illnesses include inflammation adjacent to the ischial tuberosity, pediatric ischial apophysitis and bursitis are particularly similar. Accurate differentiation usually requires imaging modalities like MRI and ultrasonography, and research shows that MRI is particularly good at showing bursal inflammation and differentiating it from bone or tendon pathology (Kerr & Shaw, 2020).

Pediatric ischial bursitis typically responds well to treatment. Conservative treatment, such as rest, ice, cushioned seating, and nonsteroidal anti-inflammatory medication, works effectively for non-septic patients. Restoring normal biomechanics and preventing recurrence can be achieved with physical treatment that emphasizes hip strengthening and hamstring stretching (Becci et al., 2019). Conversely, antibiotic treatment and, in extreme situations, aspiration or surgical drainage are necessary for

septic bursitis. Early intervention reduces the chance of persistent pain or impaired movement and guarantees quick recovery. Despite the rarity of pediatric ischial bursitis, published examples emphasize the significance of raising awareness among parents, coaches, and healthcare professionals. Early detection may be hampered by children's inability to express the precise location or level of discomfort. Evaluation for potential ischial bursitis should be prompted by persistent buttock pain, limping, or difficulty sitting comfortably, particularly if there is a history of sports participation or recent trauma. Increased awareness of this illness increases the possibility of a precise diagnosis, suitable treatment, and the best possible recovery results for kids.

CASES OF ISCHIAL BURSITIS IN ADULTS

Ischial bursitis, also known as weaver's bottom or ischiogluteal bursitis, is an inflammatory condition of the ischial bursa, which is situated between the ischial tuberosity and surrounding soft tissues. Although it is a very rare cause of buttock and posterior thigh pain in adults, the occurrence is becoming more widely acknowledged as a result of better imaging methods and increased clinical awareness. Chronic mechanical irritation, repeated microtrauma, prolonged sitting, direct trauma, or infection are the main causes of ischial bursitis in adults. Understanding these cases' patterns is crucial for precise diagnosis and efficient treatment because they manifest differently based on lifestyle choices, occupational variables, and underlying medical issues. Prolonged sitting on hard surfaces, particularly in jobs demanding lengthy hours of sedentary posture like office work, long-distance travel, tailoring, or sewing, is one of the most common causes of ischial bursitis in adults. Bursa irritation and inflammation result from persistent pressure on the ischial tuberosity. Research shows that individuals who are sedentary are much more vulnerable, especially if they have bad posture or insufficient padding (Henderson & Thomas, 2019). Deep buttock soreness is a common symptom of chronic low-grade mechanical stress on the ischial region in adults, particularly when sitting or straining the hamstring muscles.

Repetitive sporting activities also contribute considerably to adult occurrences of ischial bursitis. Runners, cyclists, rowers, and dancers commonly suffer repetitive traction stresses at the hamstring origin, resulting in overuse injuries of the ischial region. A study by Patel et al. (2017) found that overuse injuries involving the proximal hamstring complex were commonly associated with adjacent bursal inflammation, especially among endurance athletes. Chronic repetitive hip flexion and extension irritates the bursa, causing pain that radiates to the posterior thigh and sometimes mimics sciatica, leading to diagnostic challenges. Acute trauma, such as falls onto the buttocks or direct strikes during contact sports, can also cause ischial bursitis in adults. Localized swelling, soreness, and trouble sitting comfortably are common symptoms of traumatic bursitis. According to Ramirez and Colquhoun (2020), trauma-induced bursitis is frequently confused with hamstring avulsion injuries or ischial tuberosity fractures and therefore requires careful clinical evaluation and imaging when symptoms persist. Although less frequent, infection is a major contributing factor to adult ischial bursitis. When bacteria—most frequently Staphylococcus aureus—invade

the bursa through penetrating trauma, cutaneous infections, or hematogenous dissemination, septic ischial bursitis usually results. Septic bursitis is more common in adults with diabetes, alcoholism, or weakened immune systems. Case reviews by Leung and Foster (2021) emphasize that septic bursitis presents with fever, erythema, warmth, and severe pain, and without prompt intervention, may progress to systemic infection.

Because ischial bursitis resembles other musculoskeletal conditions affecting the posterior hip and thigh, diagnosing it in adults can be challenging. Bursitis may mimic or coexist with conditions like piriformis syndrome, lumbar radiculopathy, hamstring tendinopathy, and ischial tuberosity stress fractures. Diagnostic accuracy has been significantly improved by developments in imaging modalities, especially MRI and ultrasonography. When it comes to identifying inflamed bursae and differentiating bursitis from tendon or bone disease, MRI is especially helpful (Henderson & Thomas, 2019). Whether adult ischial bursitis is mechanical or septic will determine how it is treated. Conservative measures, such as rest, avoiding aggravating activities, nonsteroidal anti-inflammatory medications, physiotherapy, and using cushions when sitting, usually work effectively for non-septic cases. Injections of corticosteroids have demonstrated efficacy in situations involving chronic inflammation. A review by Patel et al. (2017) found that targeted physiotherapy aimed at strengthening the gluteal and hamstring muscles significantly reduces recurrence rates. Conversely, when conservative approaches are ineffective, septic bursitis necessitates immediate antibiotic therapy, possibly in conjunction with aspiration or surgical drainage (Leung & Foster, 2021).

Adults with ischial bursitis often have a good prognosis, however, recurrent or chronic episodes are possible, particularly if mechanical risk factors continue. Adults who participate in high-risk jobs or sports need to take preventative measures such wearing the proper protection gear, stretching exercises, and ergonomic seating. Better identification of adult instances lowers the risk of chronic pain, speeds up diagnosis, and improves the quality of life for those who are impacted.

CASES OF ISCHIAL BURSITIS IN THE ELDERLY

Ischial bursitis, also known as weaver's bottom or ischiogluteal bursitis, is an inflammatory disease that affects the ischial bursa, which is situated between the ischial tuberosity and surrounding soft tissues. The ailment can affect people of any age, but because of age-related musculoskeletal changes, decreased tissue elasticity, long-term pressure exposure, and other medical disorders, it is far more frequent in older folks. Because symptoms of ischial bursitis are frequently confused with neuropathic, degenerative, or hip-related conditions that are common with aging, it is crucial to understand how it manifests in older populations. Elderly people often develop ischial bursitis as a result of prolonged sitting, which is a common feature of advanced age, particularly in those with limited mobility. The ischial tuberosities are subjected to continuous pressure when seated for extended periods of time, whether at home, in

care facilities, or while traveling. According to Mahmood and Ferris (2018), due to decreasing soft-tissue resilience, less cushioning around bony prominences, and thinner adipose tissue, older persons are more susceptible to pressure-related injuries. The ischial bursa is more prone to irritation and inflammation as a result of these physiological alterations.

Higher rates of ischial bursitis are also a result of aging-related degenerative musculoskeletal changes. The biomechanics around the pelvis and lower limbs are altered by conditions such as osteoarthritis, lumbar spondylosis, and gluteal muscle atrophy. When sitting, standing, and walking, these dysfunctions put more strain on the ischial region. A study by Roberts and Chen (2020) reported that adjacent bursitis, including inflammation of the ischial bursa, was considerably more common in older patients with hamstring tendinopathy or gluteal weakness. Bursal irritation is made easier by age-related decrease of muscle mass (sarcopenia), which further diminishes the natural barrier surrounding the pelvis.

Elderly cases of ischial bursitis are significantly influenced by falls and slight trauma in addition to mechanical causes. Due to neuropathy, pharmaceutical side effects, vision impairments, and poor balance, falls are common among older persons. Acute inflammation of the ischial bursa can result from direct impact to the buttocks after a fall. According to studies, older persons are more likely to experience extended inflammatory reactions after trauma because their tissue repair potential is diminished (Haq & Martinez, 2021). Therefore, even seemingly insignificant events could culminate in chronic bursitis that necessitates medical attention. The higher incidence of septic bursitis is another important factor in older populations. The danger of bacterial infections that could spread to the bursa is increased by immunosenescence, chronic conditions including diabetes, and compromised skin integrity. Although less common than non-septic variants, septic ischial bursitis can develop after penetrating traumas, sacral pressure ulcers, or skin breakdown. A systematic review by Delgado and Yuen (2022) found that elderly adults accounted for most reported cases of septic bursitis in the pelvic region, with *Staphylococcus aureus* being the predominant pathogen. Fever, localized warmth, erythema, and pain are common symptoms in these circumstances, necessitating immediate medical attention to avoid systemic infection. Because the symptoms of ischial bursitis frequently coincide with those of common age-related conditions such as lumbar radiculopathy, sciatica, hip osteoarthritis, piriformis syndrome, and proximal hamstring tendinopathy, diagnosing it in older persons can be difficult. Clinical distinction is challenging because elderly patients often describe generalized posterior thigh or buttock discomfort. Accurate diagnosis often requires advanced imaging, particularly MRI and ultrasound. When it comes to detecting inflamed bursae and differentiating them from degenerative joint or tendon diseases, MRI has shown great efficacy (Roberts & Chen, 2020). Unfortunately, misdiagnosis is frequent and can occasionally result in improper management or delayed therapy. Elderly people' treatment results differ according to the underlying causes. Conservative treatment, such as rest, activity restriction, sitting cushions, physical therapy, and non-steroidal anti-inflammatory medicines, usually works effectively for

non-septic cases. However, recuperation may take longer if you have sarcopenia, osteoarthritis, or chronic pain disorders. Corticosteroid injections have shown promise in alleviating the symptoms of severe or persistent inflammation (Haq & Martinez, 2021). Injections of corticosteroids have demonstrated promise in reducing the symptoms of severe or chronic inflammation. The mobility of older persons with ischial bursitis, comorbidities, and prompt symptom detection all play a major role in their prognosis. Reducing recurrence requires preventive measures such as better chair ergonomics, pressure-relieving cushions, frequent mobility, and muscle-strengthening exercises. Increased diagnostic awareness among medical professionals is particularly essential since early detection of ischial bursitis can greatly enhance functional outcomes and quality of life for older patients.

CONCLUSION

In conclusion, ischial bursitis presents significant physical and functional challenges, including pain, reduced mobility, and impaired daily performance. Evidence-based remedies such as physiotherapy, rest, ergonomic modifications, pharmacologic therapy, and corticosteroid injections provide effective pathways for symptom relief and long-term recovery. Current literature demonstrates that conservative management remains highly effective, especially when initiated early and combined with preventive strategies that minimize mechanical stress on the ischial region. Therefore, comprehensive evaluation and timely intervention are essential for improving outcomes and preventing chronic complications associated with ischial bursitis.

RECOMMENDATIONS

- Individuals experiencing persistent gluteal or posterior thigh pain should seek medical evaluation promptly. Early diagnosis allows for timely management, preventing chronic inflammation and functional limitations.
- Rest, activity modification, heat/cold therapy, and targeted physiotherapy should be prioritized before invasive procedures. Strengthening gluteal and core muscles can improve pelvic support and reduce recurrence.
- NSAIDs or short-term pain relievers may be prescribed to manage inflammation and discomfort. In persistent cases, image-guided corticosteroid injections can be considered under professional supervision

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