Sacroiliac Joint Injection
Understanding Your Risks

This document outlines the risks and potential complication rates associated with Sacroiliac Joint Injection. The following information is based on recent evidence from prospective and retrospective cohort studies, systematic reviews, and society guidelines.

Common Risks and Their Estimated Incidence:

- Injection-site soreness: The most common delayed adverse event, occurring in approximately 12.9% of cases. Most cases resolve with simple supportive treatment.[1][2]

- Pain exacerbation (increased pain): Occurs in approximately 5.3-30% of cases. This is typically transient but may persist for several days after the procedure.[1][3][2]

- Vasovagal reaction (fainting, lightheadedness): The most common immediate adverse event, occurring in approximately 2.1-2.5% of cases. May require temporary monitoring but resolves without intervention.[1][3][2]

- Facial flushing and/or sweating: Occurs in approximately 2.3% of cases, typically related to corticosteroid effects. This is usually temporary and self-limiting.[2][4]

- Transient perineal anesthesia or numbness: Can occur when local anesthetic spreads to adjacent nerve structures. This typically resolves within hours.[3]

- Temporary sciatica-like syndrome (leg pain or weakness): Reported in 4.5-8.3% of cases in some studies. Most cases are temporary and resolve within days to weeks.[1][3]

- Technical failure (unsuccessful injection): Occurs in approximately 10-20% of cases, meaning the medication may not be accurately placed within the joint space. This rate is significantly reduced with fluoroscopic or CT guidance.[1]

- Overall complication rate: Image-guided sacroiliac joint injections have an overall complication rate of approximately 1.2-3.51%, with 99% of complications classified as minor.[5]

Corticosteroid-Related Side Effects:

- Postinjection flare: Temporary increase in pain and inflammation lasting 24-48 hours after injection.[4]

- Hyperglycemia (elevated blood sugar): Particularly important for patients with diabetes mellitus. Blood sugar monitoring may be needed for several days after injection.[4]

- Skin hypopigmentation or atrophy: Rare with intra-articular injections but possible if medication leaks into subcutaneous tissues.[4]

- Facial flushing: May occur hours to days after injection and typically resolves within days.[4]

- Adrenal suppression: Rare with single injections but possible with repeated corticosteroid injections.[4]

Rare but Serious Risks:

- Infection (septic arthritis, abscess): Although rare, infections can occur. Risk factors include diabetes mellitus, presence of prosthetic material, localized infections, elderly patients, and patients on immunosuppressive medications. Pyogenic sacroiliitis and meningitis have been reported in rare cases.[1][3]

- Nerve injury (permanent nerve damage): Extremely rare but can result from direct trauma to nerves or accidental intervertebral foraminal injection.[1]

- Hematoma (bleeding): Rare but can occur, particularly in patients with coagulopathy or taking anticoagulant medications.[1]

- Allergic reaction: To local anesthetic, corticosteroid, or contrast agents used during fluoroscopic guidance.

- Intravascular injection: May occur if vascular structures are present within or around the joint. This risk can be minimized with fluoroscopic guidance and contrast confirmation.[6]

- Herpes reactivation: Very rare complication reported in case studies.[1]

Other Considerations:

- Bilateral procedures: Patients undergoing bilateral (both sides) sacroiliac joint injections have a higher rate of delayed adverse events compared to unilateral procedures.[2]

- Age-related factors: Younger patients are more likely to report delayed adverse events, while older patients have fewer complications.[2]

- Importance of image guidance: Fluoroscopic or CT guidance significantly improves accuracy of needle placement. Without image guidance, intra-articular placement is confirmed in only 22% of cases. Fluoroscopic guidance is generally preferred over ultrasound for diagnostic injections.[1][3]

- Treatment failure rate: Approximately 13% of patients do not respond to sacroiliac joint steroid injections.[7]

- Contraindications: Absolute contraindications include local malignancy and local infection. Relative contraindications include coagulopathy, pregnancy (depending on imaging type), systemic infection, and osteomyelitis.[3]

Patient Acknowledgment:

By signing below, the patient acknowledges understanding of the above risks, their estimated incidence, and the potential for both common and rare complications associated with Sacroiliac joint Injection. All questions have been answered to the patient's satisfaction.

Patient Signature: _____ **Date:** _____

Patient Name: _____ **DOB:**_____

References

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