SPINE INTERVENTION SOCIETY
SAFETY PRACTICES FOR INTERVENTIONAL PAIN PROCEDURES

SACRAL LATERAL BRANCH BLOCKS

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These safety practices have been developed to highlight the important elements in the safe performance of interventional pain procedures. Adherence to these practices will help decrease the risk of preventable complications.

PERSONNEL

- Only physicians trained in the performance and interpretation of sacral lateral branch blocks (LBBs) should perform this procedure.
- Appropriately trained personnel are needed for the operation of the fluoroscopy unit and to assist the physician.

CONTRAINDICATIONS

- An active systemic infection or a localized infection within the procedural field
- Uncooperative patient
- The patient is unable to communicate pain level.
- Allergy to a local anesthetic used for the block that cannot safely be mitigated by pre-treatment
- Pregnancy

SEDATION

- Sedation is not intrinsically necessary for LBBs, but if employed in unique circumstances (e.g. movement disorder, cases of extreme anxiety, previous vasovagal response), the patient should remain able to communicate pain or other adverse sensations or events.
- Use of sedation may alter diagnostic conclusions.
- The decision to use sedation should be made on a case-by-case basis.
- If the physician performing the procedure decides to administer and supervise the sedation, they should be trained and qualified to do so. In these situations, a separate healthcare provider is required to assist with the administration of the medications and monitoring of the patient.
- Resuscitation drugs, monitoring equipment, and oxygen must be available if sedation is utilized.

SAFE, ASEPTIC PRACTICES

- Strict aseptic technique should be followed at all times as they pertain to the facilities, materials, patient preparation, physician preparation, personnel, and injectate/syringe preparation. Examples include, but are not limited to:
  - o Skin overlying the target region should be prepared for an aseptic procedure, preferably using chlorhexidine in alcohol. The area should then be draped to create a sterile field.
  - o A face mask and sterile gloves must be worn during the procedure.
  - o Sterile single-use syringes and needles are required, and single-dose vials should be utilized when available. Centers for Disease Control and Prevention (CDC) guidelines

for safe injection practices must be followed.
  - Acquisition, storage, and utilization of medications should be in accordance with relevant governmental guidelines such as those of the CDC in the United States.

IMAGING

- Use of image guidance is critical to ensuring appropriate needle placement and monitoring of injectate flow patterns. Image guidance reduces the risk of complications, allowing the physician to avoid vulnerable vascular or neural structures before any agent is injected or inserted. Image guidance also ensures that injectate is delivered to the target.
- The imaging technique should follow the ALARA protocols (as low as reasonably achievable) to minimize x-ray exposure for both the patient and the healthcare team.
- Fluoroscopic guidance has been used in the primary literature validating the safety of LBBs. If alternative imaging guidance is used (e.g. ultrasound), it must be able to exclude vascular uptake and show dispersal patterns that encompass the target nerve.
- The administration of contrast medium before administering local anesthetics is recommended to rule out vascular uptake.
- Obtain images documenting final needle position and appropriate contrast spread.

GADOLINIUM-BASED CONTRAST AGENTS

- Gadolinium is a drug that should be used with caution in interventional pain procedures. It should be administered only when necessary. It is prudent to consider the clinical benefit of the interventional pain treatment against the unknown potential risk of gadolinium deposition in the brain for each individual patient.
- If it is deemed that gadolinium is necessary for an interventional pain procedure where there is a very low risk of possible unintentional intrathecal administration, then the low risk of intrathecal gadolinium administration should be adequately explained to the patient.

INJECTIONS

- The ultimate choice of approach or technique to use should be made by the treating physician by balancing potential risks and benefits with each technique for each patient.
- The ultimate choice of injectate (*i.e.* long-acting compound, short-acting compound, placebo agent) should be made by the treating physician.

POST-PROCEDURE MONITORING/FOLLOW-UP

- Patients should be monitored for an appropriate time following the procedure depending upon the nature of the intervention and the agents utilized.
- Provide detailed oral and written discharge instructions to patients that outline:
  - activity restrictions for the immediate post-procedure period (e.g. not to operate a motor vehicle or machinery for the remainder of the day of the procedure),
  - potential expected side effects that may occur immediately post-injection and in the first few days following the procedure (e.g. pain at injection site), and
  - symptoms that merit immediate medical attention, and
  - when to resume usual medications and anticoagulants if discontinued for the procedure.
- Ensure patients have a follow-up plan.

SOURCES

Benzon HT, Maus TP, Kang HR, Provenzano DA, Bhatia A, Diehn F, et al. The Use of Contrast Agents in Interventional Pain Procedures: A Multispecialty and Multisociety Practice Advisory on Nephrogenic Systemic Fibrosis, Gadolinium Deposition in the Brain, Encephalopathy After Unintentional Intrathecal Gadolinium Injection, and Hypersensitivity Reactions. Anesth Analg. 2021 Mar 23. Epub ahead of print.

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DISCLOSURES

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Travel Expenses: World Institute of Pain - FIPP Exam Travel Expenses.
Other: Pain Practice Journal - Editorial Work Reimbursement.

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DISCLAIMER

While these Safety Practices are intended to identify elements critical to the safe performance of interventional spine procedures, they are not intended to be inclusive of all proper methods relevant to the safe performance of spine procedures, or exclusive of other methods of care reasonably utilized to obtain the same results. Nothing contained in these documents is intended to be used as a substitute for the care and knowledge of the individual clinician. They are guidelines based on evidence-informed expert consensus. SIS makes no representation and assumes no responsibility for the accuracy of the information contained or available through this website, and such information is subject to change without notice. The clinician's independent medical judgment, given the individual patient's clinical circumstances and preferences, should always determine patient care and treatment. Practitioners are advised to consider management options in the context of their own training and background and institutional capabilities when selecting recommended treatment options. SIS is not responsible nor does it assume any legal liability or responsibility for the accuracy, completeness, clinical efficacy, or value of any such information or any apparatus, product, or process described or referenced through this website or the information contained therein.

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THE INTERVENTIONAL SPECIALISTS' FREE RESOURCE TO HELP DECREASE THE RISK OF PREVENTABLE COMPLICATIONS

For additional information about the indications and technical aspects that yield improved treatment outcomes, refer to the *SIS Practice Guidelines for Spinal Diagnostic and Treatment Procedures*.

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