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:
  - 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.
  - A face mask and sterile gloves must be worn during the procedure.
  - 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


DISCLOSURES

Maes, Marc: Any position in a healthcare, medical, or physician society/association (committee, board, workgroup/taskforce, etc.): Board member VAVP (Vlaamse Anesthesiologische Vereniging voor Pijnbestrijding) in Belgium. Workgroup Epidural Steroids.


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