EXPAREL®
(bupivacaine liposome injectable suspension)
OPIOID FREE

Administration Case Report With EXPAREL

This case report represents the individual experience of Dr Paul Sethi and is intended to demonstrate his methodology for using EXPAREL in a specific orthopedic procedure.

Pacira Pharmaceuticals, Inc. recognizes that there are alternative methodologies for administering local anesthetics, as well as individual patient considerations when selecting the dose for a specific procedure.

EXPAREL is indicated for administration into the surgical site to produce postsurgical analgesia.

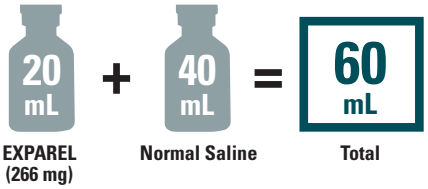
CASE INFORMATION

Physician Name	Paul Sethi, MD
Affiliation	Orthopaedic and Neurosurgery Specialists
Surgical Case Performed	Rotator cuff repair
Inpatient or Outpatient Procedure	Outpatient

PATIENT CHARACTERISTICS

Gender	Male
Age	46 years
Patient History and Characteristics	History of successful rotator cuff repair on the contralateral shoulder
Pathology	Rotator cuff tear

PROCEDURAL DETAILS

Incision Size	Arthroscopic
Preoperative Analgesics Used	Acetaminophen
Intraoperative Analgesics Used	Multimodal protocol of 150 mg pregabalin 400 mg celecoxib 10 mg dexamethasone 20 mL of 0.5% bupivacaine HCl for interscalene nerve block (single shot) 60 mL of expanded EXPAREL for local tissue infiltration
Dose of EXPAREL and Total Volume Used	

The recommended dose of EXPAREL is based on the size of the surgical site, the volume required to cover the area, and individual patient factors that may impact the safety of an amide local anesthetic. The maximum dose of EXPAREL should not exceed 266 mg.

EXPAREL can be administered undiluted (20 mL) or diluted to increase volume up to a total of 300 mL (final concentration of 0.89 mg/mL [ie, 1:14 dilution by volume]) with normal (0.9%) saline or lactated Ringer's solution.

Bupivacaine HCl may be administered immediately before EXPAREL or admixed in the same syringe, as long as the ratio of the milligram dose of bupivacaine HCl to EXPAREL does not exceed 1:2. Admixing may impact the pharmacokinetic and/or physiochemical properties of EXPAREL, and this effect is concentration dependent. The toxic effects of these drugs are additive and their administration should be used with caution, including monitoring for neurological and cardiovascular effects related to toxicity. Other than with bupivacaine HCl, EXPAREL should not be admixed with other drugs prior to administration.

Please see Important Safety Information on the last page and refer to the accompanying full Prescribing Information for complete Dosage and Administration information before using EXPAREL.

INFILTRATION NOTES

ASSESSED THE SIZE OF THE SURGICAL SITE AND DEPTH OF TISSUE, THEN PREPARED INJECTION MATERIALS ACCORDINGLY

In this procedure, Dr Sethi determined a total volume of approximately 60 mL would be needed to create a field block at the surgical site. He expanded 20 mL of EXPAREL with 40 mL of normal saline. No additional bupivacaine HCl was added to the EXPAREL mixture because the patient received an interscalene nerve block with bupivacaine HCl.

20 to 30 mL of 0.5% bupivacaine HCl may be added to the EXPAREL mixture if the patient is not receiving an interscalene nerve block.

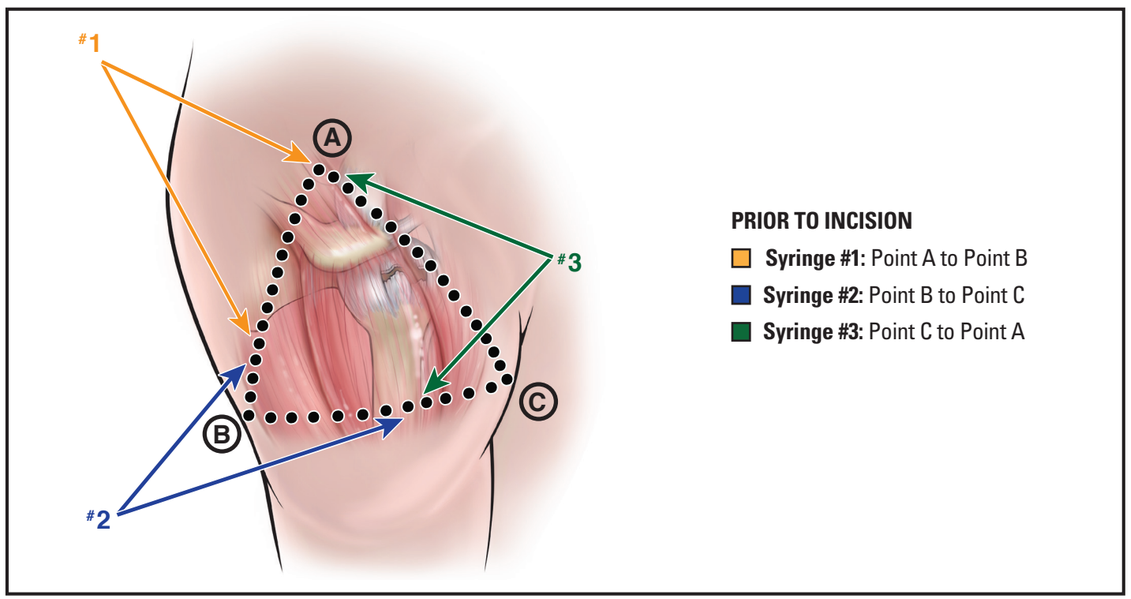
DIVIDED INJECTATE INTO SYRINGES WITH NEEDLE SIZES APPROPRIATE FOR INFILTRATION (20- TO 25-GAUGE) AND PLANNED WHICH AREAS TO INFILTRATE WITH EACH INJECTION

For this procedure, Dr Sethi divided the injectate into three 20-mL syringes with 20-gauge spinal needles.

He then marked off the surgical site as follows:

- Made standard marking of acromion, scapular spine, and clavicle
- Marked a spot 2 cm medial to the medial acromion in the Neviaser portal area, labeled "Point A"
- Drew a line from Point A over the posterior portal, ending at the patient's axilla, and named that spot "Point B"
- Drew a line from Point B to the long axis of the humerus carried anteriorly. Line should be perpendicular to the line drawn between Points A and B
- Drew a line from Point A lateral to the coracoid process. Line should be perpendicular to the line drawn between Points A and B
- Marked where lines from Point A and Point B intersected, and labeled it "Point C"

After these lines were drawn, Dr Sethi planned to infiltrate as follows:



INFILTRATION NOTES (cont)

Syringe #1:

Inserted syringe 10° anteriorly at Point A until the tip of needle encountered the bony floor of the scapula. After aspirating to ensure needle was not intravascular, Dr Sethi injected 10 mL of expanded EXPAREL. He then continued to inject 1 to 1.5 mL every 1 to 1.5 cm along the line between Points A and B.

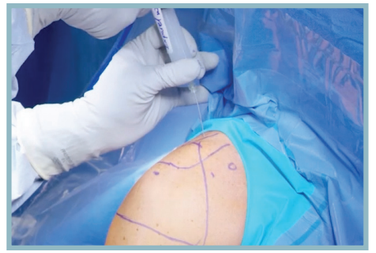


FIGURE 1. Point A to Point B

Syringe #2:

Inserted needle at Point B down to the bone and injected 7.5 to 10 mL of expanded EXPAREL. Then Dr Sethi continued to inject 1 to 1.5 mL every 1 to 1.5 cm along the line between Points B and C.

You will likely run out of injectate in Syringe #2 before reaching Point C. Use Syringe #3 to complete infiltration to Point C.

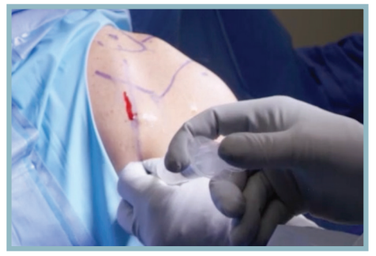


FIGURE 2. Point B to Point C

Syringe #3:

Infiltrated 1 to 1.5 mL of expanded EXPAREL every 1 to 1.5 cm until Point C was reached. Then Dr Sethi continued to infiltrate along the line between Points C and A until all remaining injectate was used.

Injections from Points C to A must be lateral to the coracoid and should not be carried to the bone.

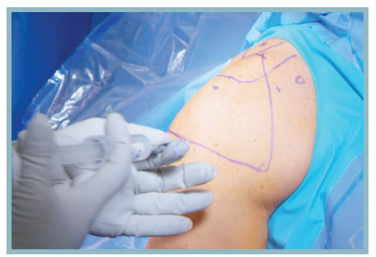


FIGURE 3. Point C to Point A

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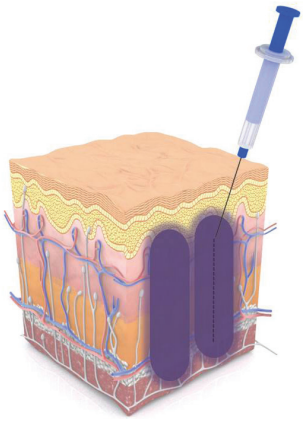
INFILTRATION NOTES (cont)

PROPER TECHNIQUE IS CRUCIAL FOR ANALGESIC COVERAGE

Dr Sethi infiltrated EXPAREL into all tissue layers using a moving needle technique. With a moving needle technique, the injections were spread in a fan-like pattern and occurred as the needle was both inserted and withdrawn to maximize the coverage area. This technique was systematically and meticulously repeated at each injection site, with overlapping diffusion of EXPAREL to ensure there were no gaps in analgesic coverage.



*Watch Dr Sethi infiltrate with **EXPAREL** at **www.EXPAREL.com***

Important Safety Information

EXPAREL is contraindicated in obstetrical paracervical block anesthesia.

In clinical trials, the most common adverse reactions (incidence ≥10%) following EXPAREL administration were nausea, constipation, and vomiting.

EXPAREL is not recommended to be used in the following patient population: patients <18 years old and/or pregnant patients.

Because amide-type local anesthetics, such as bupivacaine, are metabolized by the liver, EXPAREL should be used cautiously in patients with hepatic disease. Patients with severe hepatic disease, because of their inability to metabolize local anesthetics normally, are at a greater risk of developing toxic plasma concentrations.

Warnings and Precautions Specific to EXPAREL

EXPAREL is not recommended for the following types or routes of administration: epidural, intrathecal, regional nerve blocks, or intravascular or intra-articular use.

Non-bupivacaine-based local anesthetics, including lidocaine, may cause an immediate release of bupivacaine from EXPAREL if administered together locally. The administration of EXPAREL may follow the administration of lidocaine after a delay of 20 minutes or more. Formulations of bupivacaine other than EXPAREL should not be administered within 96 hours following administration of EXPAREL.

Warnings and Precautions for Bupivacaine-Containing Products

Central Nervous System (CNS) Reactions: There have been reports of adverse neurologic reactions with the use of local anesthetics. These include persistent anesthesia and paresthesias. CNS reactions are characterized by excitation and/or depression.

Cardiovascular System Reactions: Toxic blood concentrations depress cardiac conductivity and excitability which may lead to dysrhythmias sometimes leading to death.

Allergic Reactions: Allergic-type reactions (eg, anaphylaxis and angioedema) are rare and may occur as a result of hypersensitivity to the local anesthetic or to other formulation ingredients.

Chondrolysis: There have been reports of chondrolysis (mostly in the shoulder joint) following intra-articular infusion of local anesthetics, which is an unapproved use.

Disclosure: Dr Sethi is a paid consultant for Pacira Pharmaceuticals, Inc.