



British Pain Society and Faculty of Pain Medicine of the
Royal College of Anaesthetists

Recommendations for Good Practice in the use of Medial Branch Block (MBB) Injections and Radiofrequency Denervation (RFD) for Low Back Pain of Lumbar Facet Joint Origin

April 2020

To be reviewed March 2023



**THE BRITISH
PAIN SOCIETY**
EXPERTISE WHERE IT MATTERS



**FACULTY OF
PAIN MEDICINE**
of the Royal College of Anaesthetists

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Contents

1.	Introduction	4
2.	Consent	4
3.	Preparation and identification of patients	5
4.	Environment and facilities	5
5.	Anticoagulation	5
6.	Sedation	5
7.	Technique - Lumbar medial branch block	6
8.	Technique - Radiofrequency denervation	6
9.	Record keeping	6
10.	Follow-up and discharge planning	7
11.	References	8
12.	Appendix 1: Assessment of effect of spinal injections	10
13.	Working Party	11
14.	Conflicts of interest	11

1 Introduction

This document describes the British Pain Society (BPS) and the Faculty of Pain Medicine of the Royal College of Anaesthetists (FPMRCA) consensus opinions regarding standards of good practice for clinicians carrying out medial branch block (MBB) injections and radiofrequency denervation (RFD) as part of the management of facet joint pain in adults with persistent spinal pain. This document describes the desirable facilities required to safely carry out these procedures.

Discussions regarding the evidence base for these procedures are beyond the scope of this document. Thus the indications for facet joint procedures, choice of specific medicines to be administered and comments on the published evidence to inform the decision to carry out MBB injections and RFD are omitted.

The BPS and the FPMRCA recognise that MBB injections and RFD are performed by clinicians from a number of medical disciplines. The BPS and FPMRCA has responsibility for the professional standards of Pain Medicine Specialists and this guidance outlines the standards of good clinical practice expected for this professional group and the setting in which the procedure should be carried out. These recommendations apply both to pain physicians in training who perform MBB injections and RFD under varying levels of supervision and to established practitioners in non-training grades. The competencies expected of pain physicians are defined in the Curriculum for a CCT in Anaesthetics - Advanced Level Training (Annex E).

2 Consent

You should work in partnership with your patients when performing pain interventions. You should discuss their condition and treatment options with them. You should respect their right to make decisions about their care. You should view obtaining informed consent as a process of discussion and joint decision-making. You should be satisfied that you have consent before you provide any treatment. This will involve providing information to patients in a way that they can understand before asking for their consent. You must follow guidance provided by the GMC (2008).

In deciding how much information to share with your patients you should take account of their wishes and circumstances. The information you provide should be in proportion to the nature of their condition, the complexity of the proposed treatment and the seriousness of any potential side-effects, complications or other risks. You may need to support your discussions by using written material or visual or other aids; any material must be accurate and up to date. It must be made available in an accessible format; factors such as age, ethnicity, cognitive/communication skills and capacity must be considered. You should be aware of current recommendations about safeguarding vulnerable patients and the provisions of the 2005 Mental Capacity legislation.

If you are the pain physician providing treatment, it is your responsibility to discuss this with the patient. If this is not practical, you can delegate this responsibility to another pain physician, provided you make sure the person to whom you delegate is suitably trained and qualified, has sufficient knowledge of the proposed treatment and understands the risks involved; they should understand and act in accordance with GMC guidance.

You should identify adverse outcomes that may result from the proposed treatment including the potential outcome of taking no action. Risks will usually be side-effects/complications or failure to achieve the desired aim. You should tell patients about less serious complications if they are common and explain what the patient should do if they experience these. You should tell patients if the treatment might result in a serious adverse outcome, even if the likelihood of this is very small.

Written consent should be obtained but this is just the end point of the consent process. You should use the patient's medical records or a consent form to record the key elements of your discussion with the patient. This should include the information you discussed, any specific requests made by the patient, any written, visual or audio information given to the patient and the details of any decisions that were agreed.

3 Preparation and identification of patients

All hospital inpatients should wear wristbands (identity bands) with accurate details that correctly identify them and match them to their care. All patient identification procedures should follow national guidelines. Allergies should be checked and noted according to local policy and practice.

The World Health Organisation safer surgery checklist should be used for all procedures to ensure appropriate checking of patient identity, site and nature of planned procedure, patient preparation, and readiness of equipment.

In females of child-bearing age, when fluoroscopy is to be used, pregnancy status should be confirmed prior to the procedure according to national guidelines.

Siting an intravenous cannula should be considered dependent upon hospital policy and practice.

Patients should be fasted prior to the procedure according to hospital policy and practice. If the patient is to have conscious sedation they must follow local sedation policy.

4 Environment and facilities

MBB injections and RFD should be performed aseptically in an appropriate environment that adheres to local guidelines with regards to minimally invasive procedures. Infection prevention and control, monitoring, imaging and availability of assistance should all adhere to local policies and national guidelines. The clinical area should be large enough to accommodate the staff and equipment necessary for safe, minimally invasive procedure practice. It should have a fully equipped and staffed post anaesthesia care facility in close proximity. Resuscitation equipment and facilities must be immediately available.

5 Anticoagulation

Lumbar MBB injections and RFD are considered a low risk intervention. However if patients have other comorbidities they should be considered as intermediate risk.

It is recommended that practitioners should follow the current guidelines for medial branch block and radiofrequency denervation in patients taking anticoagulants or with pre-existing clotting abnormalities.

The benefits and risk of the procedure should be considered on an individual basis and if appropriate a multidisciplinary team involvement of supervising cardiologist, local haematology services and patient's GP may be necessary. This is important because abrupt withdrawal of anticoagulants may risk serious thrombotic episodes whereas the continued use carries an increased risk of bleeding.

6 Sedation and analgesia

Sedation may or may not be offered to the patient depending upon local practice and policies. Sedation if used, will be provided in accordance with local sedation policy.

7 Technique - Lumbar Medial Branch Block (MBB) Injections

The procedure is performed in a room that is suitable for an aseptic procedure with fluoroscopy C-arm facilities. The pain physician should be trained in the use of fluoroscopy to obtain the appropriate images and thereby have reliable information about needle position. It is the responsibility of the pain physician to gain and maintain competency in using the most effective technique. Appropriate fluoroscopic images should be stored.

The outcome of the MBB should be assessed to assist in deciding if the patient will benefit from radiofrequency denervation. Patients should be encouraged to maintain a pain diary in which the pain at rest and activities of daily living before and after the MBB are recorded at various time intervals, an example of which is available in appendix 1.

8 Technique - Radiofrequency Denervation

The pain physician must be familiar with and competent to operate the RF generator. They should be trained to interpret fluoroscopic images to obtain the appropriate images and thereby have reliable information about electrode position. It is the responsibility of the pain physician to gain and maintain competency in using RF devices and the most effective technique. Appropriate fluoroscopic images should be saved and preserved in the patient's records for clinical and legal purposes.

9 Record Keeping

Standards of record keeping should be audited in accordance with local clinical governance arrangements.

Records should include details of:

- Clinical indication for injection
- Date/time of procedure
- Type of procedure performed
- Name of clinician performing procedure (Printed and signed)
- Position of patient
- Sedation (if used), oxygen, monitoring
- Imaging
- Skin preparation
- Spinal level of injection
- Size of needle (gauge)
- Radio-opaque contrast and dose if used
- Any difficulties encountered
- Injected drugs and doses.
- Appropriate fluoroscopic images should be saved and preserved in the patient's records for clinical and legal purposes.
- If RF is preformed stimulation parameters, temperature, duration of lesion and the number of lesions should be recorded.
- Post-procedure observations
- Aftercare instructions
- Follow up arrangements
- Contact details for patient and primary care team

10 Follow Up and Discharge Planning

On the day of the procedure, patients should be seen by a member of the treating team or a specifically assigned member of staff on admission and prior to discharge. Limbs should be checked for numbness and/or weakness; the patient should be asked about urine retention or headache. Usually patients should be ready for discharge one to three hours after the procedure. Usual medication can be resumed on the day of the procedure. If there is unexpected significant limb weakness, sensory loss or headache, an unplanned overnight admission may be necessary, with review the following day before discharge.

After discharge, a reliable telephone contact number should be provided so that patient can report any acute complication such as headache, fever, prolonged numbness/weakness or urinary retention. This should be provided by day surgery units as part of the normal discharge procedure.

Other health care providers who may be involved in the patient's care after the injection (e.g. the primary care team, emergency department or day care staff) should know how to contact a member of the treating team or hospital staff by telephone to help make management decisions if necessary.

A standard letter, with a copy provided to the patient, should be sent to the patient's GP detailing the procedure and follow up arrangements. The letter should emphasise that fever, severe back pain or worsening neurological and/or urinary symptoms are potentially serious and the patient should be monitored at primary care level for any such complications.

Emergency full spine MRI scanning should be available. Arrangements must be in place for urgent referral for neurosurgical or spinal surgical opinion.

Follow up arrangements should be made for all patients after MBB injections and RFD. The time of review will depend on the patient's condition and the indications for the injection.

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12. Appendix 1: Assessment of effect of spinal injections

The injections that have been performed are to test if your pain comes from the structure/area that has been tested. It is therefore very important that you test the effect on your pain after today's injections. We would like you to evaluate your pain level and mark it with an X on the chart below.

Type of injection:

Time of injection: Date:

Pain Assessment: Please indicate how much of your 'normal' pain you have left at rest and at activities that would normally cause pain at every time interval as per the chart.

0% means that all your pain has gone. 100% means that your pain is unchanged.

If your pain is increased then please mark with an X in the square on the right.

Before the block 100% (This is your pain today)		
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	100%
First assessment after the block		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>
1 hour after block		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>
2 hour after block		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>
4 hour after block		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>
6 hour after block		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>
Day after block		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>
1 week after block		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>
At follow up visit		More Pain
0%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	100% <input type="checkbox"/>

When did the pain return to your 'usual' level?

Date: Time:

Please bring this chart with you on your next visit

13 Working Party- Second Edition

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Dr Neil Collighan, Consultant in Pain Medicine, East Kent Hospitals University NHS Foundation Trust

Ms Louise Trewern, British Pain Society, Patient Liaison Committee Representative

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14 Conflicts of interest

Dr S Gupta has organised meetings sponsored by NeuroTherm Limited who market radiofrequency generators and disposables.

Dr S Gupta is the Founder and Chairman of the North England Pain Medicine Group (NEPG). The annual meetings of NEPG have been supported by Pfizer, Abbott and other Pharmaceutical companies and equipment manufacturing industries.



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