

From the Deputy Chief Medical Officer
Dr Paddy Woods



Department of
Health

An Roinn Sláinte

Mánnystrie O Poustie

www.health-ni.gov.uk

Circular HSC (SQSD) (NICE IPG632) 35/18

**Subject: NICE Interventional Procedures Guideline
– IPG632 - Transcranial MRI-guided
focused ultrasound thalamotomy for
neuropathic pain**

Circular Reference: HSC (SQSD) (NICE IPG632) 35/18

Date of Issue: 28 November 2018

For action by:

Chief Executive of HSC Board – **for distribution to:**
Director of Performance Management & Service
Improvement
Director of Commissioning
Assistant Directors of Commissioning
Director of Integrated Care to also cascade to:
Family Practitioner Services Leads – for cascade to relevant
Family Practitioner groups

Related documents:

HSC (SQSD) 4/14

Chief Executive of Public Health Agency – **for distribution to:**
Director of Public Health and Medical Director – for cascade
to relevant staff
Director of Nursing and AHPs – for cascade to relevant
staff

Chief Executives of HSC Trusts – **for distribution to:**
Medical Directors – for cascade to relevant staff
Directors of Acute Services – for cascade to relevant staff
HSC Clinical and Social Governance Leads

Chief Executive of Regulation & Quality Improvement Authority - for
distribution to relevant independent healthcare establishments

For Information to:

Chair of HSC Board
Chairs of HSC Trusts
Chief Executive of NIAS
Chief Executive of PCC
Chief Executive of NIBTS
Chief Executive of NIPEC
Chief Executive/Postgraduate Dean, NIMDTA
Clinical Education Centre, BSO
NI NICE Implementation Facilitator
Members of NI NICE Managers' Forum

Superseded documents

None

Summary of Contents:

This guidance provides evidence-based recommendations on
transcranial MRI-guided focused ultrasound thalamotomy for
neuropathic pain in adults. This involves delivering focused
ultrasound to a small part of the brain (in the thalamus) responsible
for transmitting pain signals to destroy it.

Status of Contents:

For action

Enquiries:

Any enquiries about the content of this Circular should be addressed
to:
Quality Regulation and Improvement Unit
Department of Health
Room D1.4
Castle Buildings
Stormont Estate
Belfast
BT4 3SQ

Implementation:

Immediate

SGU-NICEGuidance@health-ni.gov.uk

Additional copies:

Available to download from
<https://www.health-ni.gov.uk/topics/safety-and-quality-standards/national-institute-health-and-care-excellence-nice>

Dear Colleague

**NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE (NICE):
INTERVENTIONAL PROCEDURES GUIDELINE – IPG632 - TRANSCRANIAL MRI-
GUIDED FOCUSED ULTRASOUND THALAMOTOMY FOR NEUROPATHIC PAIN**

The National Institute for Health and Care Excellence (NICE) produces guidance as part of the Interventional Procedure Programme. Clinicians who have developed new procedures send these to NICE to evaluate their effectiveness. Cost is not considered as part of this evaluation. Solely for this programme, NICE communicates directly with the HSC in Northern Ireland and consequently Departmental bi-monthly circulars are normally only required. An exception has been made for this due to the safety risks identified.

The advice in the NICE guideline states:

Current evidence on the safety of transcranial MRI-guided focused ultrasound thalamotomy for neuropathic pain shows there are serious safety concerns. There is very limited evidence of efficacy. Therefore, this procedure should not be used.

The HSC sector also should note that the Department expects the HSC sector to comply with this guidance in their delivery of services to patients with neuropathic pain.

Indications and current treatments

Neuropathic pain results from dysfunction of sensory nerves and pathways in the nervous system. It can occur in a heterogeneous group of disorders, including painful diabetic neuropathy, post-herpetic neuralgia and trigeminal neuralgia. People with neuropathic pain may have altered pain sensation, areas of numbness or burning, and continuous or intermittent evoked or spontaneous pain. Neuropathic pain is an unpleasant sensory and emotional experience that can have a significant effect on a person's quality of life.

A range of different drugs are used to manage neuropathic pain, including antidepressants, anti-epileptic drugs, opioids, and topical treatments such as capsaicin and lidocaine (see NICE's guideline on neuropathic pain in adults: pharmacological management in non-specialist settings). Neuropathic pain is often difficult to treat, because it can be refractory to many medications and because of the adverse effects associated with some drug treatments.

For neuropathic pain that is refractory to drug treatment, other options include percutaneous electrical nerve stimulation, spinal cord stimulation and deep brain stimulation.

Outline of the procedure

Transcranial MRI-guided focused ultrasound thalamotomy for neuropathic pain is done with the patient lying supine inside an MRI scanner. The patient's head is shaved and a stereotactic head frame is attached. Patients are awake so they can report any improvement or adverse events to the operator during the procedure. However, they may be offered light sedation. Continuous MRI and thermal mapping are used to identify the target area of the brain and monitor treatment. Low-power ultrasound is delivered to confirm the chosen location. Then, high-power focused ultrasound pulses are administered to irreversibly ablate the target tissue. Chilled water is circulated around the outside of the head during the treatment to prevent thermal damage to the scalp caused by the increase in bone temperature. The procedure takes about 3 hours and pain relief should occur within a day of the procedure.

The full NICE intervention procedure guideline is available for download at:

<https://www.nice.org.uk/guidance/ipg632>

A handwritten signature in cursive script, appearing to read 'Paddy Woods', written in black ink.

DR PADDY WOODS