

CENTRE FOR NEUROMODULATION

THE R TMS TREATMENT PROCESS

Our patients are treated by administering a non-invasive treatment programme known as repetitive Transcranial Magnetic Stimulation (rTMS). This is a form of neuromodulation; that is non-convulsive and stimulates brain tissue. The practical delivery of rTMS treatment involves firing repetitive pulses over a specific target area of the brain.



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WITH YOU**

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All patients undergo a thorough assessment with one of TMS consultants in the department at which time consent will be taken and a prescription created. A patient's age can be a factor in determining which protocols can be used. Sometimes the doctors will take the decision to amend the prescription part way through the course of treatment depending on the individual tolerance and response.

The procedure involves placement of an electromagnetic coil to deliver a burst of magnetic energy (1.5 Tesla) through the scalp to induce neurons in the outer 1cm of the brain tissue to fire. rTMS is a relatively new treatment modality for psychiatric disorders in the UK, however is already well established in neuroscience and

as a treatment for depression and anxiety in other countries.

Each treatment lasts around 40 minutes or less depending upon the protocol being used. TMS is administered on a daily basis for approximately 4 to 6 weeks. For patients travelling from outside the local area, there are protocols that can be used up to 3 times per day thus reducing the whole course time; however this will be discussed with the doctor before being prescribed.

During treatment, a series of clicking sounds can be heard and a sensation of tapping can be felt on the head underneath the coil. Ear plugs are offered to all patients.



TREATMENT SUITE 1

Treatment is administered by a trained TMS Technician who will ensure that the patient is sat comfortably in the chair.

CAP AND COIL PLACEMENT MARKING

They will then place a specially designed cap on the head in order to identify the exact position for the coil to be placed.



PROFESSOR O'NEILL-KERR PLACING THE COIL TO THE KEY AREA OF THE PATIENT'S HEAD

The coil is placed on the left side of the head to treat depression and the right side for anxiety.

