

## **Repetitive Transcranial Magnetic Stimulation (rTMS)**

### **Introduction**

Repetitive Transcranial Magnetic Stimulation (rTMS) is the method of non-invasive brain stimulation in neuro-rehabilitation. Together with conventional neuro-rehabilitation training, the usage of rTMS can promote better training result in stroke patients.

### **Procedure**

This procedure will be performed in a comfortable sitting position. It involves the use of a magnetic coil placing against your scalp in a specific area. You will be asked to hold your head steady during the procedure to prevent the coil displacement. This procedure will be carried out by the trained medical staffs and therapists.

### **Risk**

The rTMS is usually useful and safe. Still, some patients may experience mild muscle twitching over face and hands and mild transient pain during the stimulation. Only 1/10000 cases developed seizures induced by rTMS. The healthcare team will perform the safety screening before the procedure and we will make the best effort to minimize the discomfort and such risks mentioned during the procedure. During the procedure, the patient's response shall be monitored continuously to ensure safety and ear plugs will be given to minimize the noise if required. Immediate medical management will be given to any unwanted effect.

### **Preparation before the procedure**

1. You should not drink alcohol or have sleep deprivation beforehand, you should inform your doctor if you are a drinker.
2. You should inform the doctor/nurse of your drug history & follow their instruction of drug intake accordingly.
3. Please have hair washing before the day of examination. Do not put on any hair styling gel, hair wax, hair spray etc. on the hair after washing.
4. Please remove metallic objects from head and neck area e.g. Jewelry, glasses, hairclips, earrings or any headwear etc.

### **After the procedure**

1. If you feel discomfort, in-patients should inform ward nurse immediately, while out-patients should call our out-patient clinic nurse within office hour. In severe condition, you may need to seek medical advice in A&E department.