



Standard Operating Procedure for the use of Low Level Laser Light Therapy (Class 3B Laser Equipment)

Lead executive	Medical Director
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Type of document	Standard Operating Procedure
Target audience	All musculoskeletal physiotherapy staff
Document purpose	To ensure musculoskeletal physiotherapy staff are aware of the procedures for using the Class 3B laser equipment

Document consultation		
AMH – Wirral	N/A	
AMH – West	N/A	
AMH – East	N/A	
D&A services	N/A	
CAMHS	N/A	
LD services	N/A	
CCWC services	N/A	
Corporate services	N/A	
Staff side	N/A	
Other –	N/A	
Groups / Committees	Yes	Physiotherapy staff and medical devices group
Involvement taskforce	N/A	

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Original issue date	Jul-13	
Implementation date	Jul-13	
Review date	Jul-18	

CWP documents to be read in conjunction with	HR6 CP3 MH13	Mandatory Employee Learning (MEL) policy Health records policy Part IV and IVA - Consent to treatment
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Training requirements	No - Training requirements for this policy are in accordance with the CWP Training Needs Analysis (TNA)
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Financial resource implications	No
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Equality Impact Assessment (EIA)

Initial assessment	Yes/No	Comments
Does this document affect one group less or more favourably than another on the basis of:		
• Race	No	
• Ethnic origins (including gypsies and travellers)	No	
• Nationality	No	

Initial assessment	Yes/No	Comments
<ul style="list-style-type: none"> • Gender • Culture • Religion or belief • Sexual orientation including lesbian, gay and bisexual people • Age • Disability - learning disabilities, physical disability, sensory impairment and mental health problems 	No	
Is there any evidence that some groups are affected differently?	No	
If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable? N/A		
Is the impact of the document likely to be negative?	No	
<ul style="list-style-type: none"> • If so can the impact be avoided? • What alternatives are there to achieving the document without the impact? • Can we reduce the impact by taking different action? 	N/A	
Where an adverse or negative impact on equality group(s) has been identified during the initial screening process a full EIA assessment should be conducted.		

If you have identified a potential discriminatory impact of this procedural document, please refer it to the human resource department together with any suggestions as to the action required to avoid / reduce this impact.

For advice in respect of answering the above questions, please contact the human resource department.

Was a full impact assessment required?	No	
What is the level of impact?	Low	

Document change history

Changes made with rationale and impact on practice
1.

External references

References
1. Intellect Mobile Laser Model 2779 User Manual
2. http://www.electrotherapy.org/modalities/laser.htm

Monitoring compliance with the processes outlined within this document

Please state how this document will be monitored. If the document is linked to the NHSLA accreditation process, please complete the monitoring section below.	
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1. Introduction

This guideline is intended to ensure safe application of laser therapy within the musculoskeletal physiotherapy department. It is not intended to give any indication on dosage calculations or discuss clinical issues.

2. Definitions

Laser therapy is the application of light to injuries and lesions to stimulate healing in tissues. Therapy lasers fall in the category of 3A or 3B lasers and are often referred to as Low Level Laser Therapy (LLLT) or Low Intensity Laser Therapy (LILT). The laser used within the physiotherapy department is a 3B laser.

Recent research has demonstrated that laser therapy can help to resolve inflammation, reduce pain, increase speed, quality and strength of tissue repairs and resolve infection.

3. Procedure

No.	Action	Rationale
1	Take a comprehensive subjective and objective assessment	<ul style="list-style-type: none">To establish the nature of the condition and form a clinical impressionTo rule out red flagsTo ascertain clinical appropriateness of the condition for the use of laser (appendix 1)
2	Obtain documented informed consent using the patient guide to laser (appendix 2)	<ul style="list-style-type: none">To comply with physiotherapy professional guidelines
3	Treatment cubicle clearly identified and appropriately shielded.	<ul style="list-style-type: none">To mitigate any risk to staff or patients
4	Position patient appropriately	<ul style="list-style-type: none">To allow easy access to the area to be treated and comfort for patient and therapist
5	Prepare the skin using antiseptic wipes.	<ul style="list-style-type: none">To ensure safety and effectiveness of treatment.
6	To ensure patient and therapist are wearing personal protective equipment	<ul style="list-style-type: none">To ensure protection of the eyes of the therapist and patient.
7	Assess patient during treatment. Stop treatment immediately if the patient experiences discomfort or pain.	<ul style="list-style-type: none">To ensure patient and staff safety.
8	Re-assess patient for effectiveness of treatment at the next treatment appointment.	<ul style="list-style-type: none">Clinical reasoning and clinical effectiveness.

4. Duties and responsibilities

All members of staff using laser as a form of treatment need to adhere to the standard operating procedures (SOP). The Therapies Manager will approve and cascade the operating procedure for the Low Laser Light Therapy to ensure it is accessible by all staff across all sites.

The Team Leaders will ensure appropriate training is provided to all staff members. Additional training can also be provided for any individual member of the physiotherapy staff, if a development need is identified during the Personal Development Review process or in their Clinical Supervision Sessions.

Physiotherapists and physiotherapy assistants have to be familiar with the SOP and training completed before using the laser machine. They should follow the SOP and report any incidents relating to the SOP on the DATIX reporting system.

Appendix 1 - Indications and contraindication for treatment

Indications	Contraindications
<p>Increasing local blood circulation.</p> <p>Relieving minor muscle and joint aches, pains and stiffness.</p> <p>Relaxing muscles.</p> <p>Relieving muscle spasms.</p> <p>Relieving minor pain and stiffness associated with arthritis.</p> <p>Promoting nerve regeneration, bone growth and ligament repair.</p>	<ul style="list-style-type: none"> - Where analgesia may mask progressive pathology or where the practitioner wants to retain the beneficial aspects of pain. - Applied to or around the eye. - Over areas injected with steroids in the past 2-3 weeks. - Over suspicious areas or areas that contain potentially malignant tissues. - On or over a tattoo. - Over areas of active haemorrhage. - Over a pregnant uterus. - Over the thyroid or carotid sinus region of the neck. - Over the vagus nerve or cardiac region of the chest. - Directly over open wounds. - Over sympathetic ganglia. - Where no diagnosis has been made. - On patient with infections or a fever. - Over or near bone growth centre until bone growth is complete. - Over the thoracic area in patient with pacemakers. - Over ischaemic tissues in individuals with vascular disease.

Additional precautions

Over an area of the spinal cord following a laminectomy, i.e. when major covering tissues have been removed.

Over areas of absent sensation.

On patients with haemorrhagic diatheses.

Refer to the User Manual for any further details:

Intellect Mobile Laser Model 2779 User Manual – downloaded 5/7/11

Appendix 2 - Patient information leaflet

A Patient Guide to Laser

What is laser?

Low level laser therapy (LLLT) is a medical treatment that involves the application of light to injuries to stimulate healing in tissues. Recent research has shown that laser can help to resolve inflammation, reduce pain, increase speed, quality and strength of tissue repairs and resolve infection.

What can it do?

- Increase local blood circulation;
- Reduce pain;
- Reduce muscle spasm;
- Relieving minor pain and stiffness associated with arthritis;
- Promoting nerve regeneration, bone growth and ligament repair.

It is best not to have laser treatment:

- Over a cancerous area;
- Over areas injected with steroids in the past 2-3 weeks;
- On or over a tattoo;
- Over a pregnant uterus;
- On patient with infections or a fever;
- In children over parts of the joint which are still growing. These are known as the epiphyseal growth plates. Over or near bone growth centres until bone growth is complete;
- If there is an infection in the area.

Are there any risks?

You will be asked to wear goggles to protect your eyes.

Side-effects are unlikely. However, if you experience any increase in pain, you should inform your physiotherapist so that the treatment can be reviewed.

What should I feel?

You will feel the head of the laser unit on your skin. This should not cause any pain.