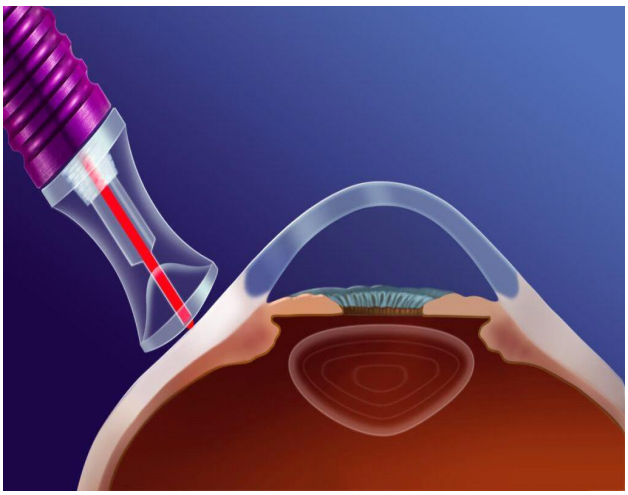
Ophthalmology Department

Micropulse Cyclodiode Laser (MPTLT)

What is Micropulse laser?

Micropulse Transscleral Laser Treatment (MPTLT) aims to lower the pressure inside your eye. It delivers short pulses of laser energy through the white of the eye to the area that helps control the fluid produced inside it.

Lowering eye pressure helps protect the optic nerve from further glaucoma damage. The laser does not require an incision into the eye.



Laser probe applied to the white of the eye

Why might I need it?

It may be considered when your eye pressure needs better control or other treatments are unsuitable. It is less invasive than traditional glaucoma surgery, as it does not involve cutting into the eye.

Micropulse Cyclodiode Laser is currently offered at CHFT as part of the Micropulse Transscleral Laser Treatment (UKMPTLT) Study

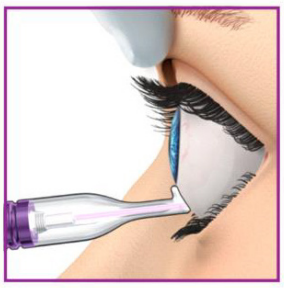
NICE recommends MPTLT only within research because more reliable evidence is needed about how well it works. At CHFT, it is currently offered as part of a study. You will receive a separate study information sheet before deciding whether to take part.

How successful is the laser?

Many people have a reduction in eye pressure, but the response varies. Published studies suggest a successful result in around 6 in 10 patients over the first 2 years; this estimate is uncertain and depends on how success is measured. Some people still need drops or further treatment. The effect may wear off with time.

compassionate care

What happens on the day?





This is usually a day-case procedure under local anaesthetic (numbing drops and an injection around the eye).

A small probe is placed on the white of the eye to deliver the laser.
The laser treatment takes only a few minutes.

You can normally go home the same day, but arrange for someone to take you home and do not drive.

AFTER THE LASER

Will I feel pain or have blurred vision?

You may notice soreness, redness, watering or blurred vision for a few days. Your vision may be affected by the anaesthetic for several hours. You will be given eye drops to settle inflammation and can usually use simple pain relief, such as paracetamol, if suitable for you.

When can I return to my usual activities?

Most people can resume gentle daily activities within a day or two, although some need longer if their vision remains blurred or the eye is uncomfortable. Do not drive until your vision has returned to normal and you feel safe to do so.

Should I continue my glaucoma eye drops?

Yes. Continue your usual glaucoma medications unless your glaucoma clinician specifically tells you to change them. Use any new drops after laser exactly as prescribed.

How will I know if the laser has worked?

You are unlikely to feel your eye pressure falling. We will arrange a follow-up pressure check, usually in about 2-6 weeks, to assess your eye response. The full benefit may take several weeks. Your clinician will tell you whether you need changes to your drops or further treatment.

Can Micropulse laser be repeated?

Sometimes. If the treatment helps but its effect reduces over time, your clinician may consider another treatment. Repeat laser is not suitable for everyone.

What are the possible risks?

The common problems are discomfort, redness, blurred vision and inflammation. Less commonly, there may be a rise or excessive fall in eye pressure, swelling inside the eye, or a change in vision. Rarely, sight may be permanently reduced. The laser may also fail to lower the pressure enough. Your clinician will discuss the risks for your eye before treatment.

When should I seek urgent advice?

Contact the Eye Department promptly if you develop worsening or severe pain, a marked fall in vision, increasing redness or unusual discharge. Do not wait for your followup appointment.

Who should I contact?

Monday–Friday, 9am–5pm: Ophthalmology Department 01484 355085
Evenings, weekends and bank holidays: CRH Ward 8D 01422 223820

About the research: This leaflet explains the treatment. The separate Participant Information Sheet covers study participation, consent and research-related visits or information collection.

Sources for clinical review: NICE HTG576 (formerly IPG692); UK MPTLT Study, IRAS 308343; CHFT leaflet suop0079 v2

If you have any comments about this leaflet or the service you have received you can contact :

Ophthalmology Department

Telephone: 01484 355085

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਜੇ ਤੁਸੀਂ ਇਸ ਜਾਣਕਾਰੀ ਬਿਸੇ ਹੋਰ ਪ੍ਰਾਰੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਬਿਜਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو یہ معلومات کسی اور فارمیٹ یا زبان میں درکار ہوں، تو
برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں.

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم المذكور أعلاه"