

Proton Therapy - Letter to Doctors

Dear Doctor,

Enquiring about suitability for proton therapy

Your patient has investigated Proton Therapy on our website MHLclinics.com and now needs your assistance in submitting preliminary information to their choice of proton therapy centre(s) please. Our website explains the benefits over radiotherapy and radiosurgery, both of which are X-ray based.

Proton therapy is not new, but until recently its use was confined to low power systems, principally for eye treatments. Modern proton therapy is more powerful and more precise. Broadly, it can be applied wherever radiotherapy is feasible and in many cases where radiotherapy cannot be applied or is insufficient.

Recent advances in scanning technologies have provided more accurate imaging of target tumours, and 'proton scanning' radiation techniques enable proton therapy to be delivered precisely on target. In practice, the limitation in accuracy is now that of the diagnostic scanning, rather than placement of the proton beams.

Proton therapy offers the gentlest form of treatment for many forms of cancer today, but the centres are very expensive to build so as yet most are in the USA or Japan. MHL works with proton centres in Germany and the USA and we are currently in discussions to add Japanese centres to our service.

The principal advantages of proton therapy are:

- 1) Three-dimensional targeting of tumours. En route to target through the body, proton beams deliver much less radiation to healthy tissue than X-ray beams. They deposit a high dose in the target and then almost nothing beyond. This 'Bragg Peak' of radiation can be adjusted finely, to deposit high dosage radiation to all parts of an irregularly shaped tumour. The result is far less radiation exposure to sensitive tissue around and beyond the tumour than X-ray systems are capable of.
- 2) Proton therapy is suitable for the very young, who are particularly susceptible to radiation damage and to the old, who are better able to tolerate proton therapy than conventional radiotherapy.
- 3) Side effects are reduced and more localised and there is less danger of radiation-induced cancers arising at a later stage.
- 4) Because of the higher concentration of radiation within the target zone, it is possible to employ higher power to treat stubborn tumours which resist conventional radiotherapy treatments.

MHL can submit enquiries to proton centres on behalf of patients, but they need recent scans and the centres will then require medical reports. Naturally we also welcome enquiries from doctors on behalf of patients and of course the centres prefer this if possible.

We are not doctors ourselves so we cannot advise on individual cases. All clinical and financial decisions are made by the proton therapy centres. We will not be party to correspondence once the introduction is made and the case is under review by the centre.

Funding of treatment

In principle E112 funding for proton therapy is available from EU governments, but in practice financial resources may be limited and there may be long delays in approving an application. Some European governments also fund treatments in the USA, but again cases will be quite restricted.

Some private health insurers cover proton therapy but, as with any treatment which is not yet available in many countries, knowledge and understanding of proton therapy is patchy. Patients will need to check their cover and/or be prepared to fund their own treatment.

Several more proton therapy centres are planned or under construction worldwide at the time of writing, so it is hoped that awareness will rise, as it did with CyberKnife radiosurgery. MHL has been handling CyberKnife enquiries for 6 years now and we our multi-centre enquiry service offers centres in Europe, Asia and the Americas.

We thank you for helping your patient apply for assessment for proton therapy, or alternatively the patient may request you to take over the application process yourself. Either way we will ensure that the enquiry is handled promptly.

Please do not send scans or medical records to us. These will be called for by the centres when required and should be mailed or uploaded directly to them, as they advise.

Yours sincerely,

Phillip Stacey Managing Director,

Medilux Healthcare Ltd.

Letter prepared 24 January, 2012