Could light therapy beat cancer in a single day?

By JEROME BURNE


Picture: SPL

A CANCER treatment that is less invasive and gruelling than conventional procedures — and cheaper — is the Holy Grail of oncology research. So imagine if that treatment already existed.

The fact is, it does — but few people know about it and few hospitals offer it.

Photodynamic therapy uses tumour-killing drugs that are activated by light. With skin cancer, first a cream is rubbed onto the affected area, then a light shone onto the cancer for 20 minutes. This creates a form of oxygen which destroys the tumour. The same technique can be used to treat cancers inside the body, if the area can be accessed with an endoscope (a flexible tube) containing a light.

The patient needs just one treatment — unlike the repeated doses required for radiotherapy or chemotherapy, and the side-effects (pain, swelling and nausea) are far milder.

Photodynamic therapy is also cheaper — doctors offering the treatment claim it costs less than half the price of chemotherapy. But despite its promise as the next generation of cancer treatment, photodynamic therapy is not widely available. There are just seven hospitals in the UK offering it as a regular treatment, even though it is licensed by the National Institute for Clinical Excellence for cancers of the skin, head, neck and oesophagus.

Now the veteran broadcaster Sir David Frost has agreed to help an appeal to increase awareness about the treatment, and to raise £6million to fund research.

'I can't understand why it isn't standard treatment,' he says. 'We are always reading about new cancer treatments that are so expensive there's a postcode lottery for them.

'Well here's one that works brilliantly and is far cheaper — yet patients are still having to fight to get it because cancer specialists often don't recommend it.'

Sir David became involved in the appeal following the experience of Professor James Knowlson — *Samuel Beckett's* biographer.

Knowlson had already had surgery and radiotherapy for a mouth tumour, when his cancer returned a year later.

'More radiotherapy was not an option because it would have destroyed my cheek, while further surgery would have involved cutting away a considerable part of it, leaving me permanently scarred,' said Knowlson.

'I would have to have had a skin transplant, and nerves controlling my mouth could have been destroyed. I would probably not have been able to produce saliva.'

Then an American specialist told him about the National Medical Laser Centre at University College Hospital, in London, where a team were using photodynamic therapy.

'This saved me from the most dreadful surgery,' says Knowlson. 'Today I speak and eat normally.' That was eight years ago, prompting Sir David's question: 'Why is it taking so long for this treatment to get the recognition it deserves?'

'I've heard of areas of the country where out of a dozen patients suitable for photodynamic therapy, perhaps only two will be offered it. That's terrible when you consider the huge difference in terms of what happens to them.'

This difference can be seen, for example, when comparing photodynamic therapy with conventional treatment for Barrett's oesophagus — a form of cancer.

THE oesophagus is the tube that runs from the mouth to the stomach. If you suffer from chronic heartburn, the acid that leaks from the stomach and into the end of the oesophagus can damage cells there, and they become pre-cancerous.

It affects about 8,000 people a year. The standard treatment is surgery, which takes around ten hours. The oesophagus is cut out and the stomach is stretched to form a replacement tube.

Afterwards, the patient can eat only liquidised food. Recovery can take nine months — five per cent of patients never recover. Treatment costs around £25,000.

With photodynamic therapy, the patient drinks a couple of glasses of liquid containing the drug. An endoscope with a light at the end is put down the throat under anaesthetic, and is shone onto the damaged cells for a few minutes.

The patient can go home the next day, and fairly soon is eating normally. This treatment costs £8,000 — £17,000 less than surgery.

Actor Mark Kingston, whose credits include playing opposite Julie Walters in Educating Rita, underwent photodynamic therapy when he was diagnosed with the disease.

'What happened was so simple that part of me wondered if it could be doing me any good, when other patients with the same condition are ripped apart. I came home on the bus the next day.'

Photodynamic therapy has been licensed to treat cancers of the head and neck for five years.

The difficulty with conventional treatment is that nerves can be severed, with long-term effects, and radiotherapy can damage saliva glands.

But Colin Hopper, consultant maxillofacial surgeon at the Laser Centre, says he hasn't found any damage to nerves with photodynamic therapy.

A study presented at the 11th World Congress of the International Photodynamic Association in Shanghai, in March, involved 39 patients who had already failed regular treatment or were unsuitable for it.

Hopper says: 'Photodynamic therapy was successful for 68 per cent of them. The success rate for chemotherapy as the first line of treatment is about 7 per cent.'

He estimates there are more than 3,000 head and neck cancer patients a year who might benefit from the treatment. It could help limit nerve damage in those with prostate cancer — which can cause incontinence and impotence.

Mr Hopper said a new study reported impressive results for patients treated with photodynamic therapy after radiotherapy had failed. 'This was a difficult group of patients with a poor prognosis,' he says.

HE ADDS: 'Out of 13 patients who had the highest and most effective dose of light, six had no sign of cancer after six months. None of them had nerve damage.

'I think there is still a feeling in the profession that it is a treatment of last resort. Even when patients ask about it, they can be fobbed off with comments about how the evidence isn't in yet, and how it needs more trials.'

Sir David Frost is emphatic: 'If there still isn't enough evidence of its safety and effectiveness, then let's get it fast.'

Stephen Bown, professor of Laser Medicine and Surgery at University College Hospital, said: 'It's been quite a battle to get doctors running clinical trials comparing treatments to include photodynamic therapy in them.

'We've spent 20 years making slow and painful progress because of a chronic lack of funds.'

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