

EXCLUSIVE BY LUCY LAING

A revolutionary treatment available for NHS patients for the first time ever in the UK is set to save a mother of four. And doctors are now hoping to save many more lives on the back of her treatment.

Gail Nicholls, 47, had a ONE IN A MILLION cancer, and was facing a certain death sentence.

She was terrified of leaving behind her husband and four children after being diagnosed with the deadly spinal tumour.

But now thanks to the NHS treatment which is being pioneered for the first time in the UK at a hospital in Manchester, Mrs Nicholls has been given a chance of survival.

The treatment is high energy proton beam therapy treatment, and previously patients had to travel abroad to hospitals in the USA if they wanted a chance to live.

But since December, the treatment is being pioneered at The Christie - a specialist cancer hospital in Manchester - and Mrs Nicholls is one of its first patients.

Mrs Nicholls said: 'I feel very lucky to be part of such a pioneering programme - and now I feel much more positive about my cancer journey.

'Without PBT my condition would be terminal - so it is giving me a chance to get through it.

'I've got four children and I want to be able to see my grandchildren born and grow up. When I was first diagnosed, I was in despair. I didn't think I was going to be able to do any of these things. But now I feel like I've been given a chance.'

Mrs Nicholls, a hairdresser, who lives in Exeter, Devon, with husband Alan, 45, a retail manager, was diagnosed just before Christmas after being admitted to the Royal Devon and Exeter Hospital with a suspected appendicitis.

She said: 'I didn't have any symptoms at all, but I was admitted to hospital with stomach pains and initially doctors thought it was appendicitis.

'I went for tests and scans and it revealed that I had a large fibroid in my womb which was causing the pain.

'It was nothing to do with the cancer - but when doctors scanned me they could see there was something on my spine too. So it was lucky that I'd had the fibroid, or else the cancer wouldn't have been found until much later.'

Tests on her spinal cord revealed that she was suffering from a rare cancerous tumour called a sacral chordoma in the lower part of her spine.

She said: 'It was such a massive shock to be told I had cancer. I knew that I had the fibroid in my womb, but that's all I thought it was. To be told I had cancer was devastating. My whole world just fell apart.'

The tumour was so rare that Mrs Nicholls, who is mother to Kieran, 31, Mitchell, 28, Jack, 25, and Olivia, 19, was referred to specialists at the Royal Orthopaedic Hospital in Birmingham.

She said: 'I was told that because of its location in the vertebrae of my lower spine that it would be very hard to treat and without treatment, the prognosis would not be good.

'It was devastating to hear. I'm a mother of four, and a wife too. To be told that I had such an untreatable cancer was just unbearable.'

Chordomas are complicated tumours to treat because of the involvement of critical structures such as the brainstem, spinal cord and important nerves and arteries.

Her case was put before a national panel of experts, who decided that PBT would be the best form of treatment for her.

The Christie Hospital in Manchester is the first NHS centre for high energy PBT in the UK, and is part of a two centre programme being funded by the NHS. A second centre is currently being built at the University College London Hospitals NHS Foundation Trust and is due to open next year.

Until both facilities are up and running at full capacity, some patients will still be referred abroad for treatment.

PBT is a specialist form of radiotherapy that targets certain cancers very precisely - reducing side effects and causing less damage to surrounding healthy tissue.

The PBT Centre at the Christie, which was built with 125 million of government funding, has been operating since December - and Mrs Nicholls is one of its first patients. Her treatment is expected to last until July.

Her family now are more hopeful of her recovery.

Husband Alan said: 'It was devastating to all of us when we knew that Gail had such a rare cancer. She is a great wife and mum, and she holds our family together.

'We are just praying that this treatment works and we can carry on our life together as a family. We feel like this treatment has given us all some hope back.

Daughter Olivia added: 'Mum is being so strong throughout it all and we are very proud of her. It's amazing what this treatment can do.'

At the PBT centre is also a dedicated research room, where a team of world leading research scientists are working to look at how protons interact with different tissues, where exactly they deposit their dose, and how precisely they cause biological damage to the tumours.

Consultant Dr Stephen Kennedy, who is treating Mrs Nicholls said: 'With PBT, compared to conventional radiotherapy, there is less dose to surrounding normal tissues compared to conventional radiotherapy and less risk of permanent long term effects of treatment. This is particularly important for tumours like Gail's which are in hard to treat areas such as the spine.'

Mrs Nicholls added: 'I am so grateful to be given this chance of having this treatment. I have gone from despair at not knowing my future, to hope that I now have a way forward through this.'

MEDICAL BOX ON PBT - HOW IT WORKS.

Proton Beam Therapy (PBT) is an advanced form of radiotherapy that uses a high energy beam of protons rather than high energy x-rays to deliver radiotherapy.

Modern radiotherapy is very good at targeting the tumour but some x-rays will still pass through the tumour and exit the body. This means a significant amount of normal tissue can be damaged unnecessarily. This can cause problems in the future, such as a growth of secondary cancers.

Proton Beam Therapy works differently. The proton beam can be made to 'stop' when needed, which not only spares surrounding tissue from being damaged, but it can allow doctors to give higher doses of radiotherapy for those tumours which are difficult to treat because they are close to other parts of the body sensitive to radiation. PBT will not be suitable for every cancer patient, but it is very effective when clinically appropriate.