

£3 diabetes pill offers hope on rare cancer

A CHEAP diabetes pill could prevent cancer in patients with a rare high-risk genetic disorder.

The first human trials are set to take place in Britain to see whether metformin can treat Li Fraumeni Syndrome [LFS].

The little-known condition is devastating, putting sufferers at a 90 per cent risk of developing cancer.

The £2million study – set to start in 2023 – will test whether the £3 blood sugar-lowering drug can delay or prevent onset.

If effective it would be the first fully-tested cancer prevention treatment for sufferers.

Chief researcher Sarah Blagden, associate professor of experimental cancer therapeutics at Oxford University, said: "There is a huge unmet need in the LFS population. It will be the largest study into LFS and the first cancer prevention study for this community."

"We hope the outcomes will provide the first, and much needed, intervention option for families diagnosed with LFS."

It is a rare inherited disorder that affects around 600 people in the UK but, with increasing use of self-testing and genetic sequencing, this number is expected to rise.

Sufferers inherit a defective copy of a gene called TP53 that plays a key role in protecting cells from cancer. Without a working TP53 gene, those with LFS stand an almost certain chance of getting one or more cancers, particularly at a young age.

Sufferers stand a 70 to 90 per cent risk, particularly of developing cancer of the brain, breast, blood and soft tissue.

LFS families commonly suffer the tragedy of losing children or parents to cancer. The study will come too late for Pan Pantziarka.

METFORMIN has been used as a treatment for diabetes for many decades, but there is new evidence it could fight against deadly genetic condition Li-Fraumeni Syndrome.

People with LFS inherit a defective copy of a gene called TP53 that has an important role in protecting cells from cancer.

Without a working TP53, those with LFS are almost guaranteed to develop one or more cancers, particularly at a young age.

There are at least 600 people diagnosed with LFS in the UK, and LFS families commonly experience the tragedy of losing children or parents to cancer.

Despite knowing LFS patients

EXCLUSIVE
By Giles Sheldrick
Chief Reporter

He lost his wife Gina to ovarian cancer and within a year their son George was diagnosed with the first of three LFS-related cancers. He died aged 17.

Pan believes the metformin trials give hope to those whose lives have been wrecked by the condition. He is in regular contact with families through the George Pantziarka TP53 Trust, set up after George died.

He said: "Many LFS families have to deal with one family member after another becoming ill with cancer. In some cases, families are dealing with multiple cancers at the same time, and there is always the knowledge another may arise. Reducing the risk with a drug like this will make the biggest difference."

Currently sufferers rely on regular scans to tell them if they have cancer.

The Metformin in Li-Fraumeni [MILF] trial, which will be jointly funded by the National Institute for Health Research and the Medical Research Council, will evaluate whether metformin can prevent or delay the emergence of cancer in people with LFS.

It is the latest repurposing trial testing the potential of a drug to treat a disease for which it was not originally intended.

Metformin, sold under brand names including Glucophage, is used to treat Type 2 diabetes, particularly for those who are overweight. It is also prescribed for polycystic ovaries. It lowers blood sugar levels by improving the way the body handles insulin.

In the trial, 200 people aged 16 and over will randomly receive metformin or a placebo, with all participants having regular scans, blood tests and assessments.

COMMENT

SARAH BLAGDEN

Associate Professor of Experimental Cancer Therapies at Oxford University

are at an exceptionally high risk of cancers, there are no clinical treatments to prevent cancer.

This means people with LFS rely solely on regular scans to tell them they are cancer-free.

Following research in the US, which showed mice with LFS

Pictures: TIM MERRY, STEVE REGATE



Legacy... Pan and Irene are shown with photos of Gina and George

I LOST MY WIFE AND SON TO DISEASE

PAN Pantziarka lost his 29-year-old wife to cancer – and within a year their two-year-old son was diagnosed with the disease.

Though medics dismissed a possible link, Pan was sure there must be one and he has since been proven right.

In 1994 Gina, his wife of 15 years, died of ovarian cancer just eight weeks after she was diagnosed – and a week before her 30th birthday.

Ten months later, George was diagnosed with the first of three cancers, a soft tissue sarcoma, on his second birthday.

George was cancer-free until the age of 15 when doctors told him he had basal cell carcinoma.

Pan, 60, from Surbiton, Surrey, believes the radiotherapy he

endured to treat this led to develop osteosarcoma, a cancer that starts in the bones.

George, who later transpired had LFS, died aged 17.

His sister Despina, 36, does not have the faulty gene.

Pan and his second wife, Irene, set up the George Pantziarka TP53 Trust, the UK's first support network for LFS sufferers and their families.

Pan, who works for The Anticancer Fund, added: "This trial – a world first – offers hope."

"We first suggested a metformin trial back in 2013."

"We are supporting families where parents have had to put off their own cancer treatment because their kids have developed the disease."

Child sex abuse calls surge to a record high

By Jemma Crew

CHILD sex abuse complaints to the NSPCC are at their highest ever level.

Some 4,735 were made in the six months to October – up 36 per cent on the same period last year.

More than 1,500 of the calls were referred to police, councils or other bodies for further action.

The National Society for the Prevention of Cruelty to Children said a "surge in publicity" about sexual violence against women and girls had also led to more victims phoning.

It follows thousands of testimonies sent to Everyone's Invited, a website where abuse survivors can share their experiences.

Founder Soma Sara said she was "proud of every survivor who had the courage to contact



Pride...Soma Sara

the NSPCC". It fears the risk of abuse has risen during Covid, with such calls continuing to rise while other concerns have dropped to pre-pandemic levels.

Part of the increase, it said, came after the charity's Department for Report Abuse in Education helpline was set up in April.

The helpline dealt with 26 contacts a day on average, from people concerned about a child.

More than 2,100 calls were about abuse at least six months ago, with 1,456 recently.

NSPCC helpline boss Kam Thandi said: "It is never too late to make a report."

The Department for Education said the helpline was a "vital service... which is why we have increased the NSPCC's core grant to £2.6million to help it continue to meet heightened demand."

Call the NSPCC on 0800 800 5000 or the Reporting Abuse in Education helpline on 0800 136 663

benefited from being given metformin, a team at the University of Oxford headed by myself and the Oncology Clinical Trials Office designed the Metformin in Li-Fraumeni clinical study, or MILF.

It will represent an important advance for the LFS community and also for cancer research because data collected from it can be applied to those with non-LFS related cancers as well.

It's an example of a Precision Prevention study, in which we are testing the benefits of metformin for cancer prevention, but at the same time monitoring participants to really understand why a

defective TP53 gene causes cancer. In the past, people with LFS have been excluded from studies as their risk of developing cancer was perceived as being unusually high.

In MILF we are turning the traditional study design on its head and focusing entirely on LFS patients. We hope to involve almost every person with a diagnosis of LFS in the UK.

Similar studies will open in the US and Germany and the data will be pooled at the end.

This will provide the largest amount of information ever gathered on LFS and will transform the support available to people with this condition.