

Dual diagnosis: Pancreatitis and diabetes

A rare condition meant Aidan McGrenra's pancreas was slowly failing. Now he's been diagnosed with a form of diabetes that is not often talked about, writes **Max Ryan**



Aidan McGrenra: "I feel I'm in a strong position living a fairly normal life."

Aidan was diagnosed with what is known as Type 3c diabetes, sometimes referred to as pancreatogenic diabetes or secondary diabetes. He receives specialist treatment from Tallaght University Hospital, which has just over 300 people with chronic pancreatitis on its clinical database.

Type 3c diabetes

Type 3c diabetes is classified as diabetes that is caused by damage to the pancreas caused by injury, cancer, chronic pancreatitis or removal of the pancreas. People with cystic fibrosis, a genetic condition which causes damage to the lungs, digestive system and other organs in the body, can also develop Type 3c diabetes.

People living with Type 1 diabetes produce very little or no insulin at all, whereas people living with Type 2 diabetes do not make enough insulin, it is not functioning effectively or do not respond normally to the insulin (insulin resistance). Those living with Type 3c can use the insulin but do not produce enough of it for normal, healthy function.

Aidan says his condition can be very erratic.

"At some stages there will be some pancreatic function and at other times my pancreas will fight against me, and not function the way my body needs it to.

"I have found that I have a reduced physical capacity and get tired more easily. Even tasks like cutting the lawn at home and at my father's house leaves me tired.

Aidan McGrenra from Donegal woke up early one morning in July 2020 feeling very sick, with cramps and spasms around his midriff. Aidan, now aged 48, was rushed to Letterkenny Hospital, where he was diagnosed with acute necrotic pancreatitis following a series of blood tests.

This aggressive form of pancreatitis is often caused by the presence of gallstones, which can be resolved through medication or the removal of the gallbladder.

In Aidan's case, however, this was ruled out as the cause. Instead doctors suspected alcohol to be the root of his illness, but he knew this couldn't be accurate as he is only a very occasional drinker.

"I had gallbladder sludge, which didn't show up on any scans. For months my gallbladder kept producing sludge and kept poisoning my pancreas."

This thick material builds up when bile remains in your gallbladder for too long and can no longer be absorbed.

"There was some really heavy duty pain involved in that," Aidan recalls.

Since the pancreas is required by the body to produce insulin, Aidan was told he would eventually be diagnosed with diabetes and would have to start taking insulin and monitoring his blood glucose levels daily.

By December 2023 his HbA1c levels had crossed the threshold of $\geq 48\text{mmol/mol}$ (or 6.5%) required for a diagnosis of diabetes to be made.

LIFE STORY

As with all people with a chronic condition, diet plays an important role in Aidan's everyday self-management of pancreatitis and diabetes.

The hormones produced by the pancreas, including insulin and glucagon which controls the body's blood glucose levels, also affects the ability to produce the enzymes which help with digestion.

"I have a very clean diet due to pancreatitis and stick to a strict low-fat, high-protein and brown carbohydrate meal plan. I have difficulty digesting food and require multiple digestive tablets with every meal. I feel I have control of the chronic pancreatitis and can manage the condition quite well."

Way of life

Aidan lost nearly 40kg in the four months following his pancreatitis diagnosis in July 2020. During this time he suffered from severe malnourishment and in his words was "unable to draw any nutrients from the food and drink I was taking".

Today Aidan describes his life as "balanced out again". He has been advised by his consultant that over time his pancreatitis will have less and less of an impact, but that the associated diabetes will continue to pose challenges.

These are challenges that father-of-three Aidan has so far had no problem in overcoming. He works as a home energy engineer for Donegal County Council and has been involved for years in coaching both Gaelic football and soccer teams locally.

"Day to day, you're constantly aware of what you've eaten last, wondering what the effects of that are on your blood glucose and during work, wondering when you can next get somewhere quiet to check your blood glucose levels."

Aidan admits that while he is now somewhat used to it, this constant stream of thinking and decision-making around diabetes management does take a toll in his daily life.

"In my case I'm driving to work, working in an office and then working on construction sites, driving home and then

What is Type 3c diabetes?

- **Type 3c diabetes develops when your pancreas experiences damage that affects its ability to produce insulin**
- **Conditions like chronic pancreatitis and cystic fibrosis can lead to pancreas damage that causes diabetes**
- **Having your pancreas surgically removed also results in Type 3c diabetes**
- **Type 3c diabetes is sometimes referred to as secondary diabetes or pancreatogenic diabetes**

getting involved in family activities.

"Your headspace is totally taken up with your condition for a lot of the time on a daily basis."

Technology

One of the most important tools in Aidan's diabetes management arsenal was the Dexcom G7 continuous glucose monitor, which he had access to for a short time on a trial basis.

"I was better able to understand the relationship between the food I was eating, exercise, nutrition, dehydration and everything else," he says.

Aidan now uses finger prick tests to monitor his blood glucose levels, as access to diabetes technology is something he says is lacking for people with a diagnosis of Type 3c diabetes.

"I find I am taking multiple finger prick tests each day, but still do not have control or a knowledge of my glucose levels," he says.

"I cannot recognise my body's signals around diabetes and I struggle with the unknowns."

Aidan says that much more needs to be provided at HSE level for patients with this diagnosis.

"Specialist nurse Marie Egan in Tallaght is one of the key links I have with the medical community and she is advocating strongly for the use of technology, but I feel the fight needs to be brought to the HSE from a representative body

like Diabetes Ireland.

"I would ask for support and strong advocacy from patients along with medical experts and with those at Board level for this to be included in any communication with the new Minister for Health and with the team in the Department of Health."

In September 2023 the Health Information and Quality Authority (HIQA) published a report which supported evidence that the use of a CGM can lead to improved average blood glucose levels for people with Type 1 diabetes compared with self-monitoring with a finger-prick test.

At that time, Dr Kate Gajewska, Diabetes Ireland Advocacy and Research Manager, welcomed the findings of the report and urged then Minister for Health Stephen Donnelly to remove all restrictions on access to all CGM systems and make them accessible to everyone with a specified clinical need.

Specified clinical need

Aidan falls into this category of someone with a specified clinical need.

"There was a real campaign and research carried out to allow people with Type 1 diabetes access to the Dexcom or any of the CGM systems. Now I think there's a requirement to extend that to other kinds of diabetes that require continuous glucose monitoring."

Aidan recognises the progress he's made since his initial pancreatitis diagnosis and is grateful for the full life he is able to lead. He says he would like to see this opportunity extended to others in a similar position whose condition might be more severe.

"Overall, I do recognise that I am one of the lucky ones and four-and-a-half years on from a time when my wife was being told over the phone that I might not survive, I feel I'm in a strong position living a fairly normal life.

"There are many others who had severe acute pancreatitis attacks, who didn't survive and I want to use any platform possible to raise awareness and provide supports for those with chronic pancreatitis and Type 3c diabetes."