

Know Type 1

I've been aware of diabetes for most of my life. My mother taught nurses about diabetes, and I made documentaries about the condition when I worked at the BBC. Yet when it was right under my nose, I missed it, almost losing my son in the process. Sam was 13 years' old when he began suffering from constipation, which prompted repeated visits to our local GP, who thought that Sam wasn't eating enough fibre. Despite my assurances that Sam was getting plenty of it, they proceeded to offer dietary advice in a bundle of leaflets. When this failed to make any impact to Sam's health over the following weeks, they turned to the first in an array of laxatives, much to Sam's alarm.

From then on, Sam spent most of his time at home dozing and looking increasingly strained. One morning, I had happened to walk in on him leaving the shower and was immediately taken aback as he was nothing more than skin and bone. My wife rang our local surgery asking for an emergency appointment and was offered one in over a week's time. By then, I was so alarmed that I rang back and told them that we were on our way down and that we didn't intend to leave until we had been seen.

Luckily, we saw a GP who took one look at Sam as he struggled to get onto the bed, and immediately performed a fingerprick blood glucose test. In under a minute, they announced that we had a very ill young boy with type 1 diabetes. Sam's blood glucose was very high and he was in severe diabetic ketoacidosis (DKA). He was taken to hospital immediately. Had we waited another day as we had been advised, we could have lost him.

We arrived home from hospital a few days later with pens, insulin and test strips. It took a good few months for the enormity of the diagnosis to sink in; the slow realisation that things were different and that our lives had changed. The dramatic start we had could have been avoided, it could have been easier, and the three of us struggled to make sense of what this diagnosis would mean. But at least we were fortunate enough to be able to start our new life with type 1 diabetes.

Some families aren't so lucky. Peter Baldwin, also 13 years old, had been unwell following a busy Christmas. His mother Beth took him to the local GP practice where he was diagnosed with a chest infection. Over the days that followed, Peter became so ill that his mother called an ambulance. When paramedics arrived they immediately did a fingerprick blood glucose test and announced that Peter had type 1 diabetes. Sadly in Peter's case, his DKA was too severe and he died in hospital.

Around one in five children with type 1 diabetes is diagnosed when they are already in DKA. A child presenting with the early stages of type 1 diabetes may appear "slightly unwell" and will not be acutely ill until their condition has become very serious. Many of the symptoms of type 1 diabetes can be easily confused with a host of other childhood conditions. Not every child will present with the classic symptoms of type 1 diabetes (increased thirst,



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COULD YOUR CHILD HAVE TYPE 1 DIABETES?

Toilet

Thirsty

Tired

Thinner

If your child is going to the toilet a lot, has increased thirst, is more tired than usual or is losing weight, it could be a sign they have Type 1 diabetes. If not diagnosed early enough, Type 1 diabetes can be fatal. Don't delay – if your child is experiencing any of the **4 Ts**, visit your doctor immediately for a test.

www.diabetes.org.uk/The4Ts

DIABETES UK
CARE. CONNECT. CAMPAIGN.

A charity registered in England and Wales (211518) and in Scotland (SC28176).

Figure 1. 4Ts Diabetes UK campaign. Available for download at: www.diabetes.org.uk/the4ts (accessed 18.04.17)

PATHWAY FOR DIAGNOSING TYPE 1 DIABETES IN CHILDREN



500 children every year become seriously ill with diabetic ketoacidosis because the early signs of Type 1 diabetes are missed.

Type 1 diabetes in children and young people – the facts:

- There are approximately 31,500 children with Type 1 diabetes in the UK.
- Approximately 3,000 children are diagnosed each year.
- 16 per cent of children are not diagnosed until they are in diabetic ketoacidosis (DKA) because the early symptoms of diabetes are missed. This rises to 24 per cent in the under 5s.
- The peak age for diagnosing Type 1 diabetes is 10–14, but it is the under 5s age group which has seen the steepest rise in recent years.
- DKA requires intensive medical intervention and is not only extremely traumatic for the child and family but also very costly to the NHS.

Help us raise awareness of the 4 Ts of diabetes

Diabetes UK is raising awareness of the most common signs and symptoms to look out for.



We have produced posters and flyers which outline the **4 Ts** (Toilet, Thirsty, Thinner, Tired) and are available for healthcare professionals to use locally. To order these, and or more information on our campaign, go to www.diabetes.org.uk/The4Ts or call **0800 585 088** (Mon – Fri, 8am to 6pm).

*Less common symptoms may also indicate diabetes:

- constipation
- oral/vulval thrush

Note: In children under the age of two, symptoms may not be immediately obvious and the child may appear to be unwell with less specific symptoms. If in doubt, perform capillary blood testing immediately.

If a child presents with any symptom of diabetes*:

- passing urine frequently/bedwetting in a previously 'dry' child/heavier nappies
 - excessive thirst
 - excessive tiredness
 - weight loss.

Perform capillary blood glucose testing immediately

Random blood glucose level > 11mmols/l

YES

Arrange for the child to see the specialist paediatric diabetes team the same day

NO

Consider other causes of symptoms

Figure 2. Diabetes UK pathway for diagnosing type 1 diabetes in children. Available for download at: www.diabetes.org.uk/the4ts (accessed 18.04.17).

urination, tiredness and losing weight, also known as the 4Ts – toilet, tired, thirsty, thinner [Figure 1]), and the symptoms of diabetes can easily be attributed to viruses, infections or even puberty. By asking whether any of the symptoms are present, a GP can recognise when it would be appropriate to perform a fingerprick blood glucose test for undiagnosed type 1 diabetes. When type 1 diabetes is suspected, an immediate fingerprick blood glucose result over 11 mmol/L will indicate that same-day referral



Figure 3. Video supported by the Welsh Government, starring David Millar-Jones, Chair of the PCDS.

to the specialist paediatric diabetes team is required (Figure 2).

My experience brought me to Diabetes UK Cymru with the ambition to raise awareness of the symptoms of type 1 diabetes and to help other families. Thanks to the Baldwin family's incredible fundraising, we are raising awareness of the dangers of late diagnosis of type 1 diabetes and will be launching our Know Type 1 campaign this summer as part of Diabetes Week (Know Diabetes. Fight Diabetes, 11–17 June 2017). As part of the campaign, we've developed a video with the support of the Welsh Government, starring David Millar-Jones, Chair of the PCDS. The video, specifically aimed at primary care staff, helps to raise awareness of the dangers of late type 1 diabetes diagnosis. The video, and videos for the public, will be available from June 2017 via the Diabetes UK website (www.diabetes.org.uk).

If you're ever in any doubt about what is wrong with the child in front of you, please think about the possibility of type 1 diabetes; you could save a life. ■

Related content in this issue of Diabetes & Primary Care

CPD module: A practical guide for primary care on children and young people with diabetes (page 79).