



Research Bulletin from the Diabetes Translational Research Group

Issue 15 – July 2014

Welcome to the Summer and the 15th issue of our research bulletin. We continue to be busy and hope you will enjoy reading about our latest activities.

'Unravelling the mysteries of diabetes' – OCDEM public open day a great success!

We were delighted that so many people were able to attend our OCDEM open day last month. The enthusiasm and interest of everyone was infectious and the whole building buzzed with conversations and questions all afternoon and well into the evening.



We received excellent feedback from people attending the event and the Oxford Mail featured an article on the activities at OCDEM. Please see this via the following link:

<http://tinyurl.com/nu2br49>



DO YOU WANT TO JOIN OUR RECRUITMENT REGISTER?

As last month's open day demonstrated, OCDEM is a very active research centre. We are, however, always dependent on volunteers who are willing to take part in clinical studies. We are therefore always looking for new volunteers, with or without diabetes, to join our recruitment register.

If you, or someone you know, would like further details on our upcoming studies, or are interested in joining our research register, please head to our TRG website at www.dtu.ox.ac.uk/trg. There is no commitment to take part in any of our studies but we will keep you informed of relevant research activity and studies that are recruiting locally via this quarterly bulletin.

New TRG studies now recruiting!

We are looking to recruit volunteers for the following two new TRG studies.

Remote Mood Monitoring study

20 people with type 2 diabetes who are about to start an injectable therapy such as insulin are needed.

This pilot study is designed to find out whether a simple website or SMS text-messaging could be used to monitor mood changes in people with type 2 diabetes.

LIXI study

30 people with type 1 diabetes are needed.

Lixisenatide (Lyxumia) is used to treat people with type 2 diabetes. This study is looking to see whether lixisenatide could also be used in people with type 1 diabetes, to improve their blood glucose control when given in addition to their usual insulin therapy.

If you think you could help with any of our studies, please get in touch with our Clinical Research Unit to find out more (E-mail cru@ocdem.ox.ac.uk or telephone Sarah White on 01865 857287).

Future TRG research initiatives.....



Diabetes & testosterone
by
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TRG Principal
Investigator

Men with diabetes are at greater risk of heart disease than women, even when well-known risk factors such as cholesterol, body fat distribution and smoking are taken into account. One possible explanation for this difference may be the lower levels of testosterone, the male sex hormone, that are seen in many men with type 2 diabetes. Several studies have shown that low testosterone levels are associated with an increased risk of heart disease in men, but no trials have yet shown that testosterone treatment can reduce this risk.

What does testosterone treatment do in men with diabetes?

Short-term studies in men with type 2 diabetes show that giving testosterone has some beneficial effects. As a result, international guidelines now recommend checking men with type 2 diabetes for low testosterone levels and, where appropriate, giving testosterone replacement treatment.

Even where clinically indicated, testosterone treatment can be problematic as unfortunately most testosterone replacement therapies tend to produce higher testosterone levels than required. This can lead to a number of side effects, including a possible increase in the risks of heart disease, worsening of prostatic disease, and an adverse effect on fertility.

Can we boost the body's own testosterone production?

Rather than giving testosterone directly, an

alternative possibility may be to restore normal production of testosterone by stimulating the body's normal testosterone production system. Such an approach may be more likely to achieve more normal testosterone levels and could therefore result in improved safety and tolerability.

Kisspeptin studies

Kisspeptin is a naturally occurring hormone that helps control testosterone secretion. Its release is affected by a number of factors, such as body weight and glucose levels. Our previous studies have shown that giving kisspeptin can increase testosterone production.

We are now planning studies that will look at whether giving kisspeptin could normalise testosterone production in men with type 2 diabetes who have low testosterone levels. These studies will explore both the potential value of naturally occurring kisspeptin as well as synthetic versions of this hormone.

Please get in touch at cru@ocdem.ox.ac.uk if you would like to hear more.

In the Headlines...

Microchip to diagnose people with type 1 diabetes developed by Stanford University

Using just a few blood drops, a palm-sized microchip has just been developed which can help diagnose type 1 diabetes, and also potentially identify people who are at risk of this condition.

This microchip test looks for autoantibodies that attack insulin-producing cells in the pancreas. These autoantibodies are much more commonly present in the blood stream of people with type 1 diabetes, but seen only rarely in those with type 2 diabetes.

Stanford University in the US are currently working to patent the device and believe this diagnostic tool will be more rapid and cheaper than current laboratory based tests. If successful, this microchip test would make it easier to distinguish between types of diabetes.

More info here: <http://tinyurl.com/md5m4y7>