The 'worried-well', insulin resistance and metformin therapy

To the Editor: Despite several recent local publications[1-3] pointing out the folly of measuring serum insulin levels, this test is still being done on a regular basis by many practitioners. There seems to be a total lack of understanding of the concept of the 'metabolic (insulin-resistant) syndrome' among the medical profession, which is resulting in a large number of essentially healthy patients being told they are 'insulin resistant' and being started on metformin therapy inappropriately.

Over the past year we have been consulted by an increasing number of such patients who are desperately concerned about their 'insulin resistance'. Generally they are young or middle-aged women, often with a history of depression or anxiety, who are overweight. Following a visit to a dietician or their doctor, insulin levels are measured, found to be elevated and the patients are started on metformin. They then have serial insulin levels measured and become fixated, often obsessed, with the blood result, without any real understanding as to what it means. Frequently these vulnerable patients are keen or even desperate to be offered a 'diagnosis' and in doing so are made 'worried-well'.

The relationships between cause and effect are misunderstood and it seems to be forgotten that obesity, inactivity and smoking cause, and are not caused by, elevated insulin levels. Hyperinsulinaemia does not cause obesity, and reducing insulin levels with pharmacotherapy does not cause weight loss.[4] Just by looking at these patients one can often surmise that their insulin levels will be raised, and the amount of money being wasted and anxiety being engendered by performing this unnecessary test is staggering.

The criteria for diagnosing the metabolic syndrome are well defined[1] and do *not* include serum insulin levels. The diagnosis is made on the basis of lipid profiles and the presence of hypertension or dysglycaemia (fasting glucose with or without a glucose tolerance test), and may include measurement of the abdominal girth. The presence of nonspecific elevations in hepatic enzymes may relate to possible non-alcoholic fatty infiltration of the liver,[5] and may be another pointer to the presence of the metabolic syndrome, although not considered part of the diagnostic criteria.

The decision whether to use insulin sensitisers in patients with impaired glucose tolerance is still being debated, but there is certainly no evidence that these drugs will either help the patient lose weight or prevent progression to diabetes in individuals without dysglycaemia. The cornerstone of treatment in these patients remains diet and exercise and the treatment of any concurrent risk factors (hypertension, dyslipidaemia), and no amount of metformin will change this. The only recognised use of metformin outside the treatment of the dysglycaemic patient would be for the treatment of infertility in women with the polycystic ovarian syndrome.

The 'commercialisation' of the metabolic (insulin-resistant) syndrome is creating a large number of 'worried-well' patients who need little more than dietary advice and an exercise programme, but are instead led to believe they have an esoteric illness. The diagnosis of 'insulin resistance' has taken over from the diagnosis of that other non-illness, reactive hypoglycaemia, which was so prevalent a decade or so ago.

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High expenses for doctors

To the Editor: I wish to appeal to SAMA – I am sure on behalf of my colleagues too – to help us decrease our expenditure.

Our membership fee for SAMA should be enough to cover everything. At present we have to pay for CPD points, congresses, and revision courses, plus protection fees.

For a start, why should we pay a huge fee every 2 years to update the Advanced Cardiac Life Support? Soon every department will cash in unless we stop the rip-offs now. The surgery, gynecology and medical departments, for example, will state: 'Knowledge of these subjects is poor after one year – rewrite or lose your licence to practice'.

I cover work every day that is more important than the ACLS, yet I have to redo it. We shall strive to have the rule forcing us to rewrite it every 2 years scrapped.

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