Editor's Comment

Diabetes – another epidemic that needn't be

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This edition of *CME* is on diabetes, an all too common disease in just about every community in the world. My father has just lost his right leg below the knee to the disease – at 83 he has probably simply lived too long with the disease. But rather than talking about my second-hand experience of the disease I invited Robert Matzdorff, one of HMPG's technical editors, to write about his first-hand experiences of diabetes. His words are telling. Take careful note!

On hearing that October's *CME* was to be devoted to diabetes and its sequelae, I jokingly said to editor and colleague Bridget Farham that I might well be in a position to write a meaningful contribution on the subject. 'Right,' she said, 'get on with it'. Hence this view, from a slightly different perspective, of an epidemic that's running rampant – yet one that is eminently preventable.

It's common knowledge that the incidence and prevalence of diabetes (predominantly type 2) are growing rapidly and forming a high percentage of the major disease burden worldwide, with costs accordingly to the patient and the State.[1] Cardiovascular disease (CVD) and stroke show a similar trend. These three diseases vary in their pathology, but a high proportion of the risk factors – around 30 - 50% – are secondary in nature, with much the same aetiologies: overweight, visceral obesity, secondary hypertension, smoking, alcohol consumption, diet low in fruit and vegetables and high in fast food – with hypernatraemia in consequence – and sedentary habits. In short: lifestyle.[2,3]

CVD, diabetes and stroke tend not to occur overnight; they generally go through a prodromal, more-or-less asymptomatic phase of many months, if not years, that eventually culminates in overt symptoms and presentation to a doctor. While diagnosis is straightforward, ideas on treatment may vary. My own case history must have been fairly typical. At the age of 59, overweight and all too sedentary, my eyesight and energy levels were deteriorating; I put it all down to the age of 59. But on developing the classic symptoms of type 2 diabetes and having a confirmatory blood glucose test at the local pharmacist, I went to my GP. His first reaction, after administering a hefty parenteral insulin shot, was to tell me I'd be on insulin for life and proceeded to instruct me in using a hypodermic syringe. I blanched whiter than his coat. Reconsidering, he referred me to an endocrinologist for further assessment. The latter examined me thoroughly, took a medical history, and the fact that I had very occasional mild gout attacks arose. 'Are you on allopurinol?' he asked.

'No,' I replied, 'I used to have bad gout attacks years ago, I established the cause was meat, and beef in particular, so I cut down drastically, but every now and then I have more than a few inches of boerewors, and pay the consequence. So I always have some colchicine at home.'

He seemed almost offended. 'But with allopurinol, you'll be able to eat meat.' 'Well, I actually don't want to. Meat's bad for me. The agony of gout imposes a discipline. I'm happy with that.' He returned to his notepad and prescribed a standard oral anti-diabetic biguanide.

I recalled that, from the first gout attack in 1988 and through subsequent bad attacks which necessitated parenteral anti-inflammatories and colchicine, the GPs concerned had never checked blood glucose, and blood pressure only on occasion. Allopurinol had been suggested a number of times. An optometrist whom I'd recently consulted about advancing myopia merely prescribed stronger spectacle lenses.

In olden-day China, it was the custom to consult your doctor regularly, follow his advice, and receive gratis medical treatment if and when you fell ill. This was in line with a Taoist precept: Big things have little things as their beginning. The doctor was expected to diagnose the little things before they became disease. Medically paraphrased, this becomes: Prevention is better than cure. And a corollary thereof is Hippocrates' dictum: Let food be thy medicine and medicine be thy food. In short, a proactive approach was taken, in which nutrition must have played a considerable role. Modern Western-style medical practice tends to take a reactive approach; the underlying philosophy might be that people nowadays are deemed to be competent in managing their health (after all, there's never been so much evidence-based scientific knowledge available), but accidents and micro-organisms and genetically based pathologies will happen. However, fast food and fast living are a widespread way of life; people *will* eat themselves into morbidity and the grave. And medical practitioners will find it nearly a fulltime job to keep up to date with research findings. (Hence the importance of journals such as *CME*!) Certainly, the correlations and common aetiologies between CVD, stroke and type 2 diabetes are well known. That gout predisposes to diabetes (and vice versa) seems less well known;[4] a common factor is reduced blood circulation, whether from high blood sugar or atherosclerosis or hypertriglyceridaemia, that leads to uric acid build-up.

As quietly and insidiously as the disease itself, type 2 diabetes has become one of the dread diseases. Even if reasonably well managed, it greatly increases the risk of a host of serious morbidities and mortality. It needs to be picked up before it starts – before the body develops an irreversible degree of insulin resistance. This can only be done, of course, if the patient presents during the prediabetic stage; bearing in mind the long duration of this period, it's more than likely that the patient *will* have cause to consult a doctor. Typical pre-diabetic symptoms are skin tags, deteriorating vision, loss of energy and libido, and predisposing conditions such as gout, raised lipids and blood pressure, visceral adiposity and nocturnal leg cramps. An on-the-spot test by glucometer plus a sample taken for HbA_{1c} testing should confirm the matter.

At which point the *really* hard part commences: to advise and motivate the patient to make permanent lifestyle changes. Some of the images in this *CME* may help.

1. Tudhope L. The diabetic foot. Continuing Medical Education 2009;7:312-315.
2. Bokyo EJ, Fujimoto NY, Leonetti DL, Newell-Morris L. Visceral adiposity and risk of type 2 diabetes mellitus: A prospective study among Japanese Americans. Diabetes Care 2000;23:465-471.
3. Felber JP, Golay A. Pathways from obesity to diabetes. Int J Obes Relat Metab Disord 2002;26(suppl. 12):S39-S45.
4. Choi HK, De Vera MA, Krishnan E. Gout and the risk of type 2 diabetes among men with a high cardiovascular risk profile. Rheumatology 2008;47(10):1567-1570.