DiabetesDIGEST
The easy way to stay up to date with developments in diabetes

Editorial

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Editor

The power of fear: Diabetes and the 'C' word

'The entire economy of the Western world is built on things that cause cancer' – from the film *Bliss*

Fear is an enormously powerful emotion. It has been used in a number of campaigns aimed at enhancing the public's awareness of diabetes and its consequences. Nevertheless, when it comes to inducing fear and anxiety in an individual's consciousness, there is only one winner: cancer.

Now, it seems that type 2 diabetes, especially if obesity is present, increases an individual's risk of developing cancer, particularly cancer of the colon (Richardson and Pollack, 2005). Fortunately, regular exercise reduces both the risk of developing colon cancer and the risk of resultant death should the disease develop (Frezza et al, 2005). Recently, though, concerns have been raised that the treatment of diabetes itself may also influence the risk of developing cancer. A question mark has been raised over insulin as a therapy in type 2 diabetes and colorectal cancer risk (Renehan and Shalet, 2005), and a news item on the American Diabetes Association (ADA) website reports a 70 % higher risk of premature death from lung cancer in people who used insulin to control their diabetes than in people who used no medication (Reuters, 2005), although the absolute numbers are not given. The same ADA news item suggests that thiazolidinediones may actually cut deaths among lung cancer patients (Reuters, 2005).

Locally, we have witnessed an explosion in the use of metformin. This seems to make sense, given that it is the only drug which has been shown to reduce premature mortality in type 2 diabetes, albeit in a subset of patients (UK Prospective Diabetes Study Group, 1998). Although the contraindications to metformin seem to be reducing in number (Eurich et al, 2005), the agent's ubiquitousness is markedly increasing the number of referrals to local gastroenterologists for investigation of altered bowel habit (personal communication, John Ainley). The availability of a newer, long-acting metformin preparation may alleviate some of this burden, but clearly there is a need for education of patients and professionals about this side effect (that said, one can understand the concern about a late diagnosis of bowel cancer). Intriguingly, new data indicate that metformin may actually reduce the risk of cancer in people with diabetes through an indirect effect on the tumour-suppressing protein kinase LKB1 (Evans et al, 2005). There are also animal data demonstrating both a reduced risk from mammary tumours and an anti-ageing effect with the agent (Anisimov et al, 2005).

Given the potential of a reduced cancer risk with metformin, we hope that it will not be too long before *Diabetes Digest* is highlighting new studies in this area. We anticipate huge WOW factors for these ones, so watch this space.

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