Clinical reviews

Our panel of GPs review recent research papers in their specialist areas that may influence the way you practise

Reviewers

Addiction
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GPwSI Substance Misuse, Leeds

Cardiovascular disease
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Diabetes
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Respiratory disease
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Diabetes

Earlier onset of type 2 diabetes increases mortality risk

Onset of type 2 diabetes at a younger age is associated with increased mortality, mainly from earlier death from cardiovascular disease (CVD), a study from Australia has found.

A retrospective analysis of medical records was carried out on patients with type 2 diabetes registered with the Australian National Diabetes Services Scheme (NDSS) between 1997 and 2011. The scheme includes 80-90% of all Australians with diagnosed diabetes. Mortality data were derived from the National Death Index. Deaths from all causes, CVD and cancer were identified.

The records of 743,709 patients with type 2 diabetes registered with the scheme were analysed. Median age at diagnosis was 58.6 years, and median follow-up 7.2 years. A total of 115,363 deaths occurred during 7.2 million person-years of follow-up.

During the initial 1-2 years following diagnosis of diabetes, rates of all cause and cancer mortality declined and CVD mortality was constant, thereafter all mortality rates increased exponentially with age. An earlier diagnosis of diabetes (longer duration of disease) was associated with a higher all cause mortality, mainly through increased deaths from CVD.

For two men of the same age but with ten years difference in duration of type 2 diabetes the one with the earlier onset and greater duration of diabetes had an approximately 30% greater chance of dying from any cause and a 60% greater chance of dying from CVD.

In this study, the effects were similar in both sexes, although other studies have reported that women are at less risk. Interestingly a diagnosis of type 2 diabetes at a younger age was associated with a lower risk of mortality from lung and colorectal cancer than diagnosis when older, perhaps because more frequent medical review was associated with earlier diagnosis, the study authors suggest.

An important limitation to this study is the fact that the NDSS does not hold information on covariates, such as ethnicity, smoking status, weight or BMI, glycaemic control, physical activity, treatment and comorbidities.

The authors conclude that earlier diagnosis of type 2 disease is associated with increased mortality mainly from CVD.

'Occurrence of type 2 diabetes at an earlier age places individuals at increased risk of premature death, especially from CVD.

'Early and aggressive risk factor management is warranted for individuals with young-onset type 2 diabetes,' they say.

DR MATTHEW LOCKYER

Huo L, Magliano DJ, Ranclère F et al. Impact of age at diagnosis and duration of type 2 diabetes on mortality in Australia 1997-2011. *Diabetologia* 2018;61:1055-63

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