Medical Xpress

UK study shows improvements in life expectancy in type 1 diabetes

September 24 2013

A study from the UK reveals that, in the population of Scotland, UK, life expectancy for people with type 1 diabetes has improved substantially, and this improvement should now be reflected in life insurance and other relevant policies for those with the condition. The research is by, Professor Helen Colhoun and Shona Livingstone, University of Dundee, UK, and colleagues on behalf of the Scottish Diabetes Research Network, and is presented at this year's annual meeting of the European Association for the Study of Diabetes (EASD) in Barcelona, Spain.

"Historically those with type 1 diabetes mellitus (T1DM) have been reported to have a reduced life expectancy compared to the general population but estimates are seldom based on contemporary data," says Professor Colhoun. "Given advances in medical care we sought to determine current life expectancy (LE) in people with T1DM in Scotland."

The researchers used data from the nationwide Scottish Care Information - Diabetes Collaboration database, which contains data for nearly all individuals with diabetes in Scotland. Anonymised data extracted from this database was linked with death data from the General Register. The study looked at people living with T1DM and aged 20 years or older anytime between 2008-2010.

In total, 24,971 persons aged 20 years and older were identified as living with T1DM in Scotland at any point in this three year period, among whom there were 1,079 deaths. The population with T1DM at the mid-

point of the study period was 22,592 persons. In those with T1DM, the remaining life expectancy those aged 20-24 years was 45 years and 47 years for men and women respectively compared to estimates of 56 and 61 years respectively for the male and female general populations.

The remaining life expectancy for those aged 65-69 years was estimated at 12 years for both men and women compared to 17 years and 19 years for the male and female general population. The difference in remaining life expectancy between those with T1DM versus the general population reduced with increasing age. In men, the difference was 11 years at age 20-24 and 5 years at age 65-69. Similarly in women, the difference was 14 years at age 20-24 and 7 years at age 65-69.

"There are surprisingly few large scale assessments of life expectancy in the historical literature," explains Dr Livingstone. However, the researchers point to some evidence that has accumulated over previous decades re improving life expectancy in T1DM. Goodkin et al (1975) [2] reported a 27 year difference in life expectancy between those with T1DM and the general population. Diabetes UK currently quote a difference of more than 20 years in life expectancy between people with type 1 diabetes and those without. The Canterbury (New Zealand) Diabetes Registry reported a difference in life expectancy with T1DM of 17 years over the study period 1984 to 1993 [3]. Recently, the Pittsburgh Epidemiology of Diabetes Complications (EDC) study of T1DM observed an increase in life expectancy of ~15 years between those participants diagnosed in 1950-1964 vs. those diagnosed in 1965-1980 [1]. Professor Colhoun says: "These data suggest that there has been a marked improvement in life expectancy for men and women with T1DM compared with earlier reports. These improvements should now be reflected in life insurance and other relevant policies for those with T1DM. Despite these improvements there remains a substantial gap in life expectancy between the T1DM and general populations that needs to be addressed."

The researchers have tried contacting several of the major insurance underwriters over the previous year to try to get information on what data they are using for setting insurance premiums, but have not had any replies.

"However we know anecdotally from various patients that larger differences in life expectancy are being quoted to them than what we have found. It is important to emphasise of course that these are average differences – among the population with type 1 diabetes there will be some subgroups with greater and some with lower life expectancy depending on risk factor profile and that premium setting involves risk factor assessment usually too," explains Prof Colhoun.

The researchers conclude that there is still much room for improving risk factor management in the T1DM population, as shown by a recent study by the same group [4] describing glycaemic control, smoking rates, obesity and blood pressure control. Better treatment approaches are needed. Overall only 13%, met the target of an Hba1c

Citation: UK study shows improvements in life expectancy in type 1 diabetes (2013, September 24) retrieved 6 May 2024 from https://medicalxpress.com/news/2013-09-uk-life-diabetes.html