

A prospective cohort study on the effect of various risk factors on hypoglycaemia in diabetics who fast during Ramadan

ABSTRACT

Muslim diabetics who fast during Ramadan are at risk of hypoglycaemia, and previous consensus guidelines have highlighted certain risk factors. This prospective cohort study aims to determine the relative risk (RR) of hypoglycaemia during Ramadan fasting compared with a non-fasting period of equivalent length, and to ascertain which risk factors are clinically significant. From the results, Ramadan fasting carries a RR of hypoglycaemia of 1.60 (95% CI 1.05 to 2.43). Good metabolic control (HbA1c < 8%) and old age (> 60 years) increased RR more than twice, while taking breakfast prior to fasting reduces RR to less than half.

Keyword: Cohort studies; Fasting; Hypoglycemia; Islam; Risk assessment; Type 2 diabetes mellitus