

The pattern of fasting among pregnant women with diabetes mellitus during Ramadan

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ABSTRACT

Introduction: The risk of Ramadan fasting in pregnant women with diabetes mellitus (DM) is either moderate or high, based on the IDF-DAR (International Diabetes Federation - Diabetes and Ramadan Alliance) risk stratification tool. This study was conducted to describe the pattern of Ramadan fasting among pregnant women with DM and to calculate their risk score for fasting. **Methods:** A cross-sectional survey post Ramadan whereby Muslim pregnant women with DM attending antenatal clinic in Hospital Putrajaya and Klinik Kesihatan Putrajaya were interviewed for fasting days, episode of hypoglycemia (blood glucose $<3.9\text{mmol/l}$), hyperglycemia (blood glucose $>16.0\text{mmol/l}$) and hospital admission during Ramadan. Using IDF-DAR risk calculation, scores were calculated retrospectively and medical notes were reviewed for demographic and diabetes information. **Results:** There were fifty-nine patients with a mean age of 35 years and the majority were multigravida. More than half of them had gestational diabetes mellitus (57.6%). There were 41 patients (69.5%) who had moderate risk with more than half having GDM. Eighteen patients (30.5%) had high risk with most of them having Type 1 and Type 2 DM. Mean fasting days were 15 days in moderate-risk and 7.8 days in high-risk group ($p=0.041$). There were 12.2% (moderate-risk) and 22.0% (high-risk) episodes of hypoglycemia reported. Hyperglycemia was 5.6% in high-risk groups and none in moderate-risk. Only two patients in the high-risk group required admission during Ramadan. **Conclusion:** All pregnant women with DM who fasted during Ramadan were in a moderate and high-risk group. The mean fasting days were less in a high-risk group due to the high risk of complications.