ABSTRACT

Introduction:

Peripartum cardiomyopathy (PPCM) is common in Northern Nigeria and in some selected populations worldwide, and is associated with significant mortality. However, its frequency, clinical features, risk factors and in-hospital mortality have not been recently well characterised. The study therefore aimed to describe the frequency, characteristics, risk factors and in-hospital mortality of PPCM in two referral centers in Kano, Nigeria.

Method: It was a case-control study conducted at the departments of Medicine and Obstetrics/Gynaecology of Aminu Kano Teaching Hospital (AKTH) and Murtala Mohammad Specialist Hospital (MMSH), Kano.

Results: A total of 50 cases and 50 controls matched for age and parity were consecutively recruited into the study. Of these, 20 cases and 30 controls were recruited from AKTH while the rest were from MMSH. The frequency of PPCM was found to be 1 case in 103 deliveries. The mean age of the patients and controls did not differ significantly (22.8 ± 5.2 years vs. 24.1 ± 5.1 years, P = 0.2). Majority of the PPCM patients (47; (94%) and controls, (42; (84%) were Hausa-Fulani by tribe and 24(48%) were primiparous. PPCM risk factors that were significantly more frequent among patients than controls were low income occupation (petty trading, substinces farming and tricycle driving; p=0.02), low educational attainment (informal education 30(60%) vs. 12(24) p=0.0002), warm water bath (28(56% vs. 15(30%) p=0.002), consumption of sodium rich salt pap (27(54%) vs. 12 (24%) p=0.002). The mean left ventricular ejection fraction was 28.5±8.6%. In hospital mortality was high 8 (16%) and independently predicted by serum creatinine (OR=0.96, 95CI=0.93-0.99, p=0.02).

Conclusion: PPCM patients were predominantly ethnic Hausa and Fulanis who were low income earners, without formal education but with a surprisingly high proportion of young primiparous. They had peculiar puerperal customary practices and presented late with severe left ventricular
dysfunction and renal impairment. In-hospital mortality was high and independently predicted by serum creatinine.