EDITORIAL

MATERNAL OBESITY AND THE RISK OF HYPERTENSIVE DISEASE IN PREGNANCY

Hypertensive disease in pregnancy complicates about 10% of pregnancies[1] and remains a major cause of maternal morbidity and mortality as well as perinatal mortality. At the Korle Bu Teaching hospital (KBTH) annual statistical reports (2016 and before) have demonstrated that it has overtaken haemorrhage as the leading cause of maternal death for over a decade It contributed 30 % of all maternal deaths in 2016[2]. In most of the teaching and tertiary hospitals in Ghana it is the leading cause of institutional maternal death.

The cause and the prevention of hypertensive disease in pregnancy especially preeclampsia is not exactly known. There have been several theories. The current theory is that preeclampsia is a two –stage disorder with maternal and fetal interactions linking the 2 stages. The first stage is reduced placental perfusion from abnormal placental development, and the second stage is the maternal syndrome which develops in a subgroup of women with some genetic, behavioral and environmental characteristics in response to factors produced by the poorly perfused placenta[3]. Obesity is one of the maternal characteristics that plays a role in the maternal syndrome, and therefore an important risk factor for the development of this condition. Other known risk factors include primigravidity, primipartenity, family history, hypertensive disease in previous pregnancy, extremes of reproductive age, multiple pregnancy, chronic hypertension, renal disease, and autoimmune disease etc. Many of these are, however, not modifiable. Obesity, together with overweight, is one of the modifiable risk factors. It is therefore imperative that clinicians and health workers managing pregnant women don't overlook this. This has become even more crucial today than in time past, as the prevalence of obesity has increased in the last 15 years in west Africa, especially among women[4]. In Ghana, data from the 2008 Demographic& Health Survey(GDHS) indicate that 29% of women are overweight and 12% are obese[5]

Buckman and colleagues write in this issue that body mass index (BMI) before 20 weeks gestation is a strong independent risk factor for development of hypertensive disease in pregnancy. They demonstrated that the risk of hypertension in obese pregnant women at the 37 Military hospital was double that in the women with normal BMI. They also found an increased risk of developing hypertension with increase in BMI within each BMI category. In their cohort, the proportion of patients developing hypertension in the obese and overweight category was 14% whilst that for normal BMI was 9%. Their recommendation that health workers attending to obese pregnant women, monitor blood pressure carefully especially in the 2nd trimester is very laudable. Ideally, there should be education of our women to reduce weight before embarking on the pregnancy to optimize their general outcome.

In another related article[6], on blood pressure patterns and body mass index among antenatal attendants at the KBTH, Amoakoh-Coleman and co demonstrated that obese pregnant women had a threefold increased risk of hypertensive disease in pregnancy, compared to those with normal BMI. From the foregoing, if we are going to achieve some reduction on the prevalence and impact of hypertensive disease in pregnancy, we may have to include in our antenatal and prepregnancy protocols some interventions, for preventing or early detection and management of obesity.

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