

Grandmultiparity as a Risk factor in Antenatal and Obstetric Outcome in Mosul

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Abstract

The objective of this study was to assess grandmultipara as a risk factor in antenatal and obstetric outcome in Mosul. The study was conducted on 28328 pregnant women attended Al-Khansa teaching hospital for the period 1/9/2017 to 30/8/2018. Grandmultipara represented 23%. The preexisting medical conditions in Grandmultipara were hypertension (16.9%), anemia (4%), diabetes (0.9%), APH (2.1%), PPH (5.6%). Thyroid diseases (1.2), UTI (2.3) and vaginal infections (2%). The obstetric outcomes showed high percentages of CS (23.4%), premature labor (22%) and abortion (5.7%). Congenital anomalies represented (0.35), PMR (0.37), ectopic gestation (0.78%), placenta accrete (1.3%), H. mole (0.3%) and finally low fetal body weight.

Keywords: Grandmultiparity; Obstetric Outcome; Risk Factor

Introduction

Grandmultiparity (GM) has been described since 1934 [1] and is associated with many complications. High parity and reduced inter-pregnancy intervals were reported to be a risk factors for poor maternal and prenatal outcome. These may predispose mother to diabetes mellitus, anemia, hypertension, malpresentation, macrosomia, preterm labor, post-partum hemorrhage (PPH) and placenta previa [2,3]. These complications make GM a significant risk factor in developing countries leading to maternal death [4,5]. However, developed countries have low prevalence of GM [6] and is not considered as a risk a risk factor for pregnancy related complications [7,8]. The conflicting data on significance of GM probably reflects the wide range of factors that may not be related to parity but rather to other variable such as weight, genetics [10].

The current study was conducted to assess the obstetric outcome in grandmultiparity in Mosul.

Methods

This study was conducted in Mosul on a total number of 28328 pregnant women attended Al-khansa teaching hospital for the period 1/9/2017 to 30/8/2018 and GM represented 23%. One thousand case sheaths for GM patients were prepared containing three parts of questionnaires. The first part was demographic characters such sex, age and parity. The second part included antenatal records and systemic diseases and the third part focused on postnatal and delivery outcome.

Results

The general information about patients included in this study is shown in table 1. The total pregnant women was 28328, 23294 delivered normally and 5034 by CS. Primigravida represented 36.5% while grandmultiparity was 23%, and the remaining (40.5%) was multipara.

Items	Number or percentage
Total pregnant admitted	28328
Total normal delivers	23034
Total CS delivers	5034
% of primigravida	36.5%
% of multipara	40.5%
% of grand multipara	23%

Table 1

The mean parity for GM was < 4 and the main age was > 34 years old. The GM represented 23%. The preexisting medical conditions are shown in figure 1. Diabetes mellitus was (0.9%), hypertension 16.9%, thyroid diseases (1.2%), anemia 4%, APH 2.1%, PPH 5.6%, UTI (2.3%) and vaginal infections (2%).

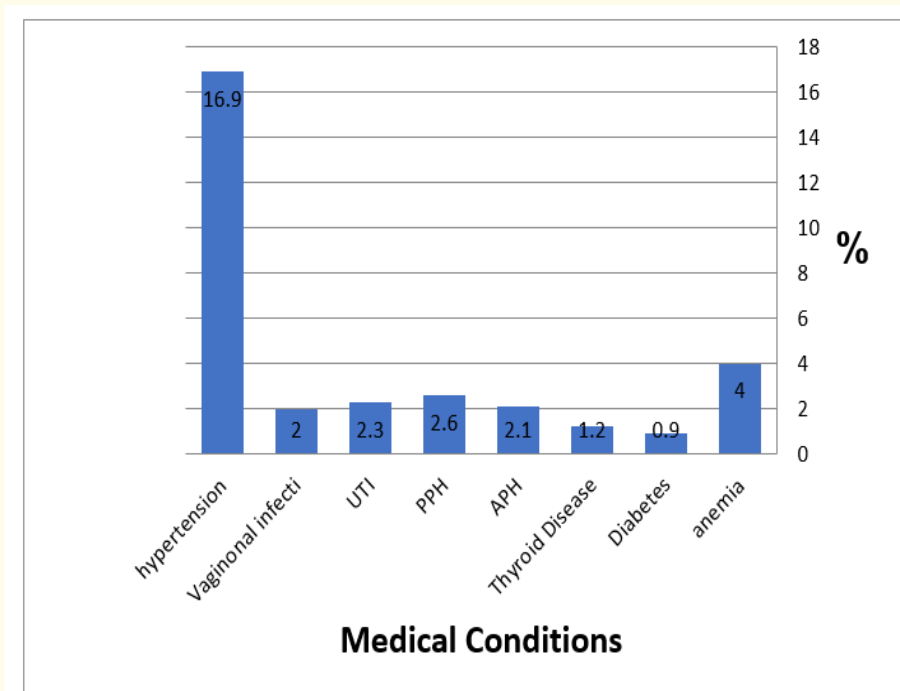


Figure 1: Preexisting medical conditions in GM.

The obstetric outcomes in GM are shown in table 2. High percentages was noticed in premature labor (22%) and CS (23%). Others were moderate to low percentages; PMR (0.37%), congenital anomalies (0.35%), ectopic gestation (0.78%), placenta accrete (1.3%), H. mole (0.3%) with low fetal body weight.

Item	%
CS	23
Abortion	5.7
Premature labor	22
PMR	0.37
Congenital abnormality	0.35%
Ectopic gestation	0.78%
Placenta accrete	1.3%
H. mole	0.3%
Fetal weight > 2500g	7.7%
Fetal weight 2500 - 3500g	64.8%
Fetal weight < 3500	27.5%

Table 2: Obstetric outcomes in GM.

Discussion

Grandmultipara as a risk factor is controversy. Most of complications in GM are related to age or associated medical diseases. In many studies there was no additional risk in young healthy GM [10].

The present study showed a risk of maternal and neonatal complications in GM patients. Anemia was common problem in GM patients despite iron and folic acid was given to patients. This problem may be due to low socioeconomic status and repeat childbearing depleted iron store and predispose to anemia [9]. Hypertension was also high in GM patients (16.9%) as patients in older age although Bugg, *et al.* [7] did not find an increased risk.

There was low percentage of gestational diabetes (0.9%) comparable with others [11], but others found high prevalence of diabetes [12]. The prevalence of premature labor was high in GM patients, similar finding was achieved in Malaysia [13]. Also high prevalence of PPH, APH was noticed, comparable results also seen by others [9]. High prevalence of CS (23%) was noticed in this study which is probably linked to tendency of obstetricians to avoid difficult deliveries. Increased prevalence of CS have been noticed even in developed countries [14,15].

Low fetal weight delivery was seen in this study as noticed by others [11].

Conclusion

This study showed that GM was a risk factor associated with increased prevalence of many maternal and neonatal complications.

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