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PREECLAMPSIA IN TURKEY

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INTRODUCTION

Preeclampsia is the most common hypertensive disorder of pregnancy, with the incidence of %2-35. The incidence varies in accordance with the criteria used for diagnosis and the population studied mortality. Maternal mortality due to hypertensive disorders is 1.5, 7, 9.1 per 100.000 live birth in Netherlands, in United Kingdom, in United States of America respectively. In developing and underdeveloped countries the rate is high as 420 and 640 per 100.000 live birth in Asia and Africa respectively. In Turkey maternal mortality rate due to preeclampsia varies between reference centers, the range is %0.0- %20.1 among the maternal deaths from all direct and indirect obstetric causes. Although preeclampsia is reported to be the second most common cause of maternal mortality following the postpartum bleeding in Turkey, national data are lacking.

The objective of this study was to collect and analyze the data in Turkey.

MATERIAL AND METHODS

A questionnaire was prepared to collect the data on the type of the preeclampsia, maternal mortality and morbidity rate, gestational age at delivery, the mode of delivery, birth weight of the neonate, previous history of preeclampsia and maternal age. Department of Obstetrics and the data collected from 7 University, 1 HMM and 1 HSII were analyzed.

Data Analysis: Data analysis was performed by using SPSS software. Comparison among groups for characteristics of centers was performed by one-way variance analysis. A p value <0.005 was considered significant.

RESULTS

From 9 centers data about 1316 cases collected. Centers were symbolized with numbers.

Seventy-two percent of the patients' age were between 19-35 years. Mean maternal age was $28,40 \pm 6,9$ years (range between 16-44 year).

The incidence of mild, moderate and severe preeclampsia were %42.6, %27.3 and %29.9 respectively.

Most of the severe cases were from center 9 (Cerrahpaşa, İstanbul). The rate of mild preeclampsia was almost same in all centers.

Out of 1312 cases 484 (%36.8) were nulliparous and 733 (%56.6) were grandmultiparous.

Nearly five percent of the cases had a previous preeclampsia history. But there was no correlation between the type of the preeclampsia and previous history of preeclampsia.

The high rate of cesarean section in the severe cases is statistically significant ($p < 0.005$).

Cesarean section was the preferred mode of the delivery in the severe cases with the rate of %53 in the study population. Cesarean section indications were due to maternal conditions in %45.3 of the cases. In mild preeclampsia group both the mean gestational age and neonatal weight were higher than the severe preeclampsia group. This difference was statistically significant ($p < 0.005$). The incidence of cases with gestational age between 28-37 week was %78.9.

Different therapeutic regimens were preferred by the centers, but the main therapeutic agents administered in the centers was $MgSO_4$ (i.v). Even in the mild preeclampsia $MgSO_4$ (i.v) was the drug of choice.

DISCUSSION

This is the first study conducted to evaluate the incidence and the national epidemiological data about the preeclampsia in Turkey. Several studies from different Turkish centers with small numbers and various parameters were published both in Turkish and English literature. But the data collected in this study have been showned that there was no uniformity in the registration of the patients. Mean maternal age was $28,40 \pm 6,9$ years. In contrast with the other studies there was no significant difference between maternal age and the severity of preeclampsia.

Although preeclampsia is reported to be the predominantly a disease of primigravidae, in this study the rate of primigravidity was %36.8.

The rate of previous history of preeclampsia was %5. In the literature recurrence rate was reported as %13 and %18 in the primiparous and multiparous respectively. Despite the high multiparity rate (%63.2)

in the study, the recurrence rate was found to be low when compare to the literature. Mode of delivery was cesarean section in %45.3 of the cases due to maternal conditions. Although there is a general consideration as preeclampsia is not an indication for cesarean section, cesarean section still was found to be the most common mode of delivery in preeclampsia in the study.

MgSO₄(i.v) administration was the first and the α -methyl dopa was the second choice of therapeutic agent in the management of all types of preeclampsia. The rate of MgSO₄(i.v) administration in the mild preeclampsia was %36.15.

CONCLUSION

Demographic characteristics of preeclampsia are different in various geographical region. In order to reach the correct data from different regions, and better understanding of the epidemiology of the disease uniform data collection and analysis must be done.

Preeclampsia is the most but not the first cause of maternal mortality in Turkey.

There must be an agreement about the management in all types of preeclampsia including the mode of delivery.

Epidemiological data from every health care center will provide the information about the real incidence and the demographic characteristics of the disease in Turkey, which can be different from the other geographical parts of the world.

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