CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

http://doi.org/10.5281/zenodo.2529176

Available online at: http://www.iajps.com ***Research Article***

THROMBOCYTOPENIA IN WOMEN WITH PREGNANCY INDUCED HYPERTENSION

[1] Major General Khurshid Muhammad Uttra, [2] Dr. Naila Khurshid, [3] Dr. Bikha Ram Devrajani, [4*] Dr. Syed Zulfiquar Ali Shah

[1] Professor of Medicine, Army Medical College, Rawalpindi

[2] Assistant Professor Gynecology and Obstetrics Foundation University Medical College, Fauji Foundation Hospital Rawalpindi

[3]Professor of Medicine and Vice Chancellor LUMHS Jamshoro

[4]Assistant Professor Department of Medicine LUMHS Jamshoro

Abstract

Objective: *To determine the frequency of thrombocytopenia in women with pregnancy induced hypertension.*

Patients And Methods: *The cross sectional investigation investigated the pregnant women having pregnancy actuated hypertension for thrombocytopenia conceded at tertiary care hospital. The data were arranged and statistically analyzed by SPSS.*

Results: *The present study included one hundred cases of hypertensive disorders of pregnancy, of which 8% were diagnosed with gestational HTN, 60% with mild preeclampsia, 25% severe preeclampsia and 7% had eclampsia. Fifteen (25%) out of 60 cases of severe preeclampsia had features of HELLP syndrome. The cases ranged from 20 to 35 years of age with a mean age 26.98±7.62 respectively. The thrombocytopenia was observed in 72% patients of which mild thrombocytopenia was observed in 20%, moderate in 35% and severe in 17%.*

Conclusions: *The gestational thrombocytopenia is a common medical emerging problem in hypertensive disorders of pregnancy, thus proper follow up during and after pregnancy is recommended.*

Keywords: *Hypertensive disorders of pregnancy, Eclampsia, Preeclampsia and Thrombocytopenia*

Corresponding author:

*** Dr. Syed Zulfiquar Ali Shah,**

Assistant Professor Department of Medicine,
LUMHS Jamshoro
Email: zulfikar229@hotmail.com

QR code

Please cite this article in press Khurshid Muhammad Uttra et al., ***Thrombocytopenia In Women With Pregnancy Induced Hypertension.,*** *Indo Am. J. P. Sci, 2018; 05(12).*

INTRODUCTION:

Thrombocytopenia convolutes up to 7-8% all pregnancies. The advanced acknowledgment of the condition is fundamentally inferable from robotized complete blood count, which routinely incorporates platelet quantity [1]. A large portion of this abatement happens amid the third trimester and is related with a move in the histogram of platelet tally dispersion. It might result from an assortment of causes; going from considerate disarranges, for example, gestational thrombocytopenia to dangerous disorders, for example, HELLP disorder – Haemolysis, Elevated liver proteins, low platelet tally [2]. Thrombocytopenia is characterized as sub ordinary number of platelets in the circling blood. A finding of thrombocytopenia amid pregnancy represents an interesting issue before the obstetricians [3]. Thrombocytopenia entangling hypertensive issue of pregnancy is in charge of around 20% of all instances of thrombocytopenia amid pregnancy. The thrombocytopenia in preeclampsia is gentle to direct, yet extreme thrombocytopenia can happen [4]. Patients with eclampsia were at considerably more serious hazard for creating extreme thrombocytopenia. Also, bound to have HELLP disorder, which is a subset of preeclampsia. Thrombocytopenia is a key and fundamental segment of this disorder. Thrombocytopenia results mostly from four procedures – artifactual thrombocytopenia, lacking platelet creation, quickened destruction and pooling of platelets. This is portrayed essentially by seeping from little vessels. The season of beginning of these scatters amid pregnancy and their clinical indications frequently cover, making the finding of explicit issue troublesome. Thrombocytopenia conveys a hazard for both the mother and her embryo, related with generous maternal or neonatal dreariness and mortality. Anyway explicit treatments, whenever founded immediately, it enhances the result of influenced patients and their posterity. Thus this review consider was done to know the occurrence of thrombocytopenia in pregnancy incited hypertension and its impact on maternal and fetal out come.

PATIENTS AND METHOD:

The cross-sectional investigation investigated the pregnant women having pregnancy actuated hypertension for thrombocytopenia conceded at tertiary consideration doctor's facility. The details will be entered in the proforma regarding the detailed history of period of gestation, high risk factors, and complications- during present and past pregnanc, similar to PIH, diabetes mellitus, APLA, intra uterine passing, abruptio, and hepatitis. The previous history of pregnancy instigated hypertension, hypertension, diabetes mellitus and haemorrhagic disorders were also explored. The exclusion criteria were the patients having irresistible scatters as jungle fever, viral hemorrhagic fever, insusceptible thrombocytopenia and hematological malignancies. The information was enrolled on proforma while investigated in SPSS to stratify the subjective and quantitative factors.

RESULTS:

The present study included one hundred cases of hypertensive disorders of pregnancy, of which 8% were diagnosed with gestational HTN, 60% with mild preeclampsia, 25% severe preeclampsia and 7% had eclampsia. Fifteen (25%) out of 60 cases of severe preeclampsia had features of HELLP syndrome. The cases ranged from 20 to 35 years of age with a mean age 26.98±7.62 respectively. The thrombocytopenia was observed in 72% patients of which mild thrombocytopenia was observed in 20%, moderate in 35% and severe in 17%. Instance of preeclampsia, eclampsia, and HELLP syndrome were observed to be increasingly regular in the primigravida patients (60%), while gestational HTN was seen just in multiparous patients. In the different sorts of PIH, 15% of cases demonstrated poor maternal result and 20% cases indicated poor fetal result. Maternal intricacies were just found in eclampsia and extreme preeclampsia cases. Of maternal PPH, HELLP disorder and abruption while the fetal difficulties were watched were perinatal mortality and intrauterine development confinement (IUGR).

DISCUSSION:

Thrombocytopenia convoluting hypertensive issue of pregnancy is around 10% and the preeclampsia influences around 6% all things considered [5]. In our investigation of a half year length there were 100 instances of PIH and the in current arrangement 65% of instances of thrombocytopenia were found in pregnancy prompted hypertension. This contrast and the accompanying thrombocytopenia in PIH. Occurrence of thrombocytopenia among patients with extreme PIH and eclampsia around 25% in the investigation by Gernsheimer T, et al [6]. Patients with extreme preeclmapsia and eclampsia have a noteworthy maternal mortality which can go from 1-3% because of multi framework organ disappointment [7]. Severe preeclmapsia with thrombocytopenia produces unfriendly impact of perinatal mortality [8]. Most perinatal passings were from extraordinary rashness and its entanglements, for example, respiratory misery disorder and sepsis. The thrombocytopenia in pregnancy-initiated

hypertension is moderate, and the platelets once in a while dip under 20,000/L. Hemorrhage is a remarkable occasion except if the patient creates dispersed intravascular coagulation, however thrombocytopenia can be an indication of intensifying hypertensive illness [9]. A gradually diminishing platelet check can be noted before the clinical signs of pregnancy initiated hypertension. At the point when joined by microangiopathic hemolytic paleness, hemolysis, raised liver catalysts, and low platelets, HELLP disorder is analyzed. The reasons for thrombocytopenia from pregnancy-incited hypertension and HELLP disorder are obscure. One clarification is that it may be identified with strange vascular tone with resultant quickened platelet obliteration, platelet initiation, and coagulation defects. The expanded dimensions of platelet-related immunoglobulin G (IgG) that have been distinguished in patients with pregnancy-instigated hypertension have been appeared to be nonspecific and don't really infer an immunologic reason for the thrombocytopenia [10]. The thrombocytopenia all the more regularly happens with the early beginning of pregnancy prompted hypertension and conveys extreme bleakness to both mother and hatchling. HELLP disorder stays dangerous for the obstetrics human services suppliers. The non explicit signs and indications of this issue from the get-go in the sickness procedure makes the precise determination troublesome and defers early treatment, which has the best guess for the both maternal and fetal result [11]. Thrombocytopenia perse did not influence the method of conveyance. Gentle thrombocytopenia was normal in third trimester and had a kind course. Organization of corticosteroids dexamethasone protects to mother ought to be done as quickly as time permits to build the platelet check and to upgrade lung development and to diminish the danger of intraventricular discharge and necrotising enteriocolitis between 28 to 34 weeks thus decreasing the maternal and perinatal morbidity and mortality [12].

CONCLUSION:

Thrombocytopenia in pregnancy induced hypertension carries a risk for both the mother and her foetus. The associated causes like abruption, retain dead foetus, septicemia and disseminated intravascular coagulation aggravates the complication for thrombocytopenia. Uniformity in utilization of classification and categorization of cases with PIH is also needed for better understanding of the disease process. The search for one marker that would identify and gauge the severity of PIH still continues and follow up by obstetrician, physician, and paediatrician is recommended.

REFERENCES:

1. Weinstein L. Syndrome of hemolysis, elevated liver enzymes, and low platelet count: a severe consequence of hypertension in pregnancy. American journal of obstetrics and gynecology. 1982 Jan 15;142(2):159-67.
2. Burrows RF, Kelton JG. Fetal thrombocytopenia and its relation to maternal thrombocytopenia. New England Journal of Medicine. 1993 Nov 11;329(20):1463-6.
3. Burrows RF, Andrew M. Neonatal thrombocytopenia in the hypertensive disorders of pregnancy. Obstetrics and gynecology. 1990 Aug;76(2):234-8.
4. Romero R, Mazor M, Lockwood CJ, Emamian M, Belanger KP, Hobbins JC, Duffy T. Clinical significance, prevalence, and natural history of thrombocytopenia in pregnancy-induced hypertension. American journal of perinatology. 1989 Jan;6(01):32-8.
5. Giles C, Inglis TC. Thrombocytopenia and macrothrombocytosis in gestational hypertension. BJOG: An International Journal of Obstetrics & Gynaecology. 1981 Nov;88(11):1115-9.
6. Gernsheimer T, James AH, Stasi R. How I treat thrombocytopenia in pregnancy. Blood. 2013 Jan 3;121(1):38-47.
7. Lowe SA, Bowyer L, Lust K, McMahon LP, Morton M, North RA, Paech M, Said JM. SOMANZ guidelines for the management of hypertensive disorders of pregnancy 2014. Australian and New Zealand Journal of Obstetrics and Gynaecology. 2015 Oct 1;55(5).
8. Vest AR, Cho LS. Hypertension in pregnancy. Current atherosclerosis reports. 2014 Mar 1;16(3):395.
9. Kattah AG, Garovic VD. The management of hypertension in pregnancy. Advances in chronic kidney disease. 2013 May 1;20(3):229-39.
10. Moussa HN, Arian SE, Sibai BM. Management of hypertensive disorders in pregnancy. Women's health. 2014 Jul;10(4):385-404.
11. Naljayan MV, Karumanchi SA. New developments in the pathogenesis of preeclampsia. Advances in chronic kidney disease. 2013 May 1;20(3):265-70.
12. Seely EW, Ecker J. Chronic hypertension in pregnancy. Circulation. 2014 Mar 18;129(11):1254-61.