TO STUDY THE ASSOCIATION OF ANTIPHOSPHOLIPID ANTIBODY SYNDROME WITH FOETAL LOSS

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ABSTRACT: OBJECTIVES: The basis of this study is to see the association of foetal loss and APA positivity and to study the prevalence of PIH and IUGR in such cases. **METHODS:** This study included 100 pregnant women. Essential criterion for case selection was: One or more unexplained deaths of morphologically normal fetuses at or after the 10th week of gestation. Or one or more premature births of morphologically normal neonates at or before the 34th week of gestation or three or more unexplained consecutive spontaneous abortions before the tenth week of gestation.
The following parameters were specifically looked for in above patients

- Pregnancy induced hypertension, of early onset (onset of hypertension i.e., a BP of 140/90 mm Hg or more after 20 weeks of gestation.)
- Presence of IUGR i.e., intrauterine growth restriction.

RESULT: The incidence of APA positivity was found to be 15% in this group of patients who had pregnancy loss with or without PIH and IUGR. The incidence of PIH and IUGR was 53% and 46% in APA positive patient respectively while the same was 36% and 32% in APA negative patients. **CONCLUSION:** High suspicion of Antiphospholipid antibodies syndrome should be kept in mind in cases with repeated foetal loss, PIH and IUGR.
KEYWORDS: Antiphospholipid antibodies, recurrent pregnancy loss, PIH and IUGR.

INTRODUCTION: Antiphospholipid Antibody Syndrome, a condition characterized by one or more thrombotic or pregnancy- related clinical features in association with medium to high levels of Antiphospholipid antibodies. These antibodies are clinically very important to the obstetrician due to strong association found between them and occurrence of adverse obstetric outcome.[1]
These outcomes include: Missed abortion, Recurrent stillbirths, Second and third trimester pregnancy loss, Preeclampsia of early onset, IUGR, Choria gravidarum and Neonatal thrombosis.

APS is considered primary if it is not associated with other autoimmune disease and secondary when it is associated with other autoimmune disease like systemic lupus erythematosis. Three types of APA are clinically important. Anticardiolipin antibody – IgG, IgM, Lupus anticoagulant and biologically false positive test for syphilis (BFP – STS).

Indications for testing for the presence of APA:

- Repeated miscarriage
- II or III trimester pregnancy loss
- Placental abruption
- Early onset PIH / preeclampsia
- IUGR
- Thrombocytopenia
- SLE

The present study "To study the association of antiphospholipid antibody syndrome and pregnancy loss" was undertaken to find the association of APA in cases of fetal loss and the perinatal with maternal outcome in such cases.

METHODS: The present study was carried out in the Department of Obstetrics & Gynaecology, Sultania Zanana Hospital Bhopal. The study included 100 pregnant women. On a specially designed Performa for this study the patient particular, detailed Obstetric history, medical and surgical history was taken. Essential criterion for case selection was: One or more unexplained deaths of morphologically normal fetuses at or after the 10th week of gestation. Or one or more premature births of morphologically normal neonates at or before the 34th week of gestation or three or more unexplained consecutive spontaneous abortions before the tenth week of gestation.

The following parameters were specifically looked for in above patients

- Pregnancy induced hypertension, of early onset (onset of hypertension i.e., a BP of 140/90 mm Hg or more after 20 weeks of gestation.)
- Presence of IUGR i.e., intrauterine growth restriction.

Detailed Obstetrics History with past medical / surgical history was taken. Specific investigation for APS ie. anticardiolipin antibody (ACA), Lupus Anticoagulant (LA) were done. In addition marker of liver function, renal function and hematological profile were studied.

OBSERVATIONS: 100 patients suffering from pregnancy loss with or without IUGR were studied for presence of antiphospholipid antibodies (* Lupus anticoagulant and anti cardiolipin antibody). Out of 100 cases 15% cases were APA positive and 85% were APA negative. One observation of that there is a 100% concordance rate between ACA and LA positivity. The booking status was 40% in APA positive patients and 45% in APA negative patients with pregnancy loss with or without IUGR and PIH. In APA positive group almost 50% were in age group 20-25 years and remaining in more than 25 years group while none was in less than 20 years groups. In APA negative group 58% were in age group of 20 to 25 years. 66.6% patients were from rural group in APA positive while in APA negative 62% were from rural group. In APA positive group 33% had platelet count less than 1 lakhs/cmm while in APA negative group only 8% had a platelet count less than 1 lakhs/cmm. In APA positive group 53% had PIH and 13% had severe PIH. In APA negative group 36% had PIH and 5% had severe PIH. 50% of APA positive patients had severe IUGR of early onset while only 32% of APA negative patients had severe IUGR of early onset. In APA positive group 26% had birth weight below 1 kg, 50% had between 1-2 kg and only 20% had weight above 1.5 kg, while corresponding figures in APA negative group were 17%, 20% and 62% respectively. In APA positive group – 20% had abortion, 20% had still birth, 6% had PTVD with ND 53% had live birth. In APA negative group – 31% had abortion, 28% had still birth, 4% had PTVD with ND 35% had live birth.

DISCUSSION AND CONCLUSION: Antiphospholipid. Antibodies have been responsible for many adverse obstetric outcomes. Most of these are explainable by their tendency to produce vasculopathy at feto- maternal inter phase. In these cases 15% cases were APA positive which is comparable to various other studies which show a rate of 12-20% [2.] . In the present study platelet

count was to be severely decreased in 33% APA positive patients while in APA negative patients only 8% had count below 1 lakh which is comparable with the study by Harris EN et al [3]. It is evident that severity of PIH increases in the patients with APA due to more severe disease in them. These results are in accordance with the studies of Kaleli et al (1998) where they had found that positive levels of APA were more prone to develop PIH. In our study, in APA positive group 53% had PIH and 13% had severe PIH. In APA negative group, 36% had PIH and 5% had severe PIH. 50% of APA positive patients had severe IUGR of early onset this is an accordance with the fact that UIGR is more severe and of earlier onset in APA positive patients as also seen in studies by Kaleli et al (1998) and yasuda et al (1995) where they have found that APAS is associated with adverse pregnancy outcome such as preeclampsia and IUGR[5].

Positive group – 20% had abortion, 20% had still birth, 6% had PTVD with ND 53% had live birth. APA negative group – 31% had abortion, 28% had still birth, 4% had PTVD with ND 35% had live birth in negative group.

In untreated APA positive population, rate of abortion, still birth and neonatal death are higher as compared to APA negative population. In conclusion this study further confirms that there is a correlation between APS and many obstetrics complications and suggests that screening for APA must be done routinely in such cases.

OUTCOME OF PREGNANCIES	APA POSITIVE	APA NEGATIVE
ABORTIONS	3	27
FSB	2	14
MSB	1	10
PTVD WITH ND	1	4
LIVE	8	30

OUTCOME OF PREGNANCIES

	APA POSITIVE	APA NEGATIVE
MILD PIH	4	14
MODERATE PIH	2	12
SEVERE PIH	2	5

RELATIONSHIP WITH PIH

PALTLET COUNT LACS/ CMM	APA POSITIVE	APA NEGATIVE
< 1 lakh/cmm	5	7
1- 1.5 Lakh/cmm	7	40
> 1.5 Lakh/cmm	3	38

RELATIONSHIP WITH PLATELET COUNT

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