2. The International Federation of Gynecology and Obstetrics (FIGO) initiative on pre-eclampsia: A pragmatic guide for first-trimester screening and prevention / L. C. Poon [et al.] // Int J Gynaecol Obstet. – 2019. – Vol. 145, Suppl. 1. – P.1–33.

3. Shared risk factors for COVID-19 and preeclampsia in the first trimester: An observational study / B. Serrano [et al.] // Acta Obstet Gynecol Scand. – 2022. – Vol. 101, № 7. – P. 803–808.

4. Sathiya, R. COVID-19 and Preeclampsia: Overlapping Features in Pregnancy / R. Sathiya, J. Rajendran, S. Sumathi // Rambam Maimonides Med J. – 2022. – Vol. 27, № 13. – P. 7.

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PREGNANCY OUTCOMES WITH PROPER TREATMENT STRATEGIES IN WOMEN WITH ANTIPHOSPHOLIPID SYNDROME IN SRILANKA

Introduction

Antiphosholipid syndrome (APLS) is an autoimmune disease which is associated with recurrent pregnancy loss with the presence of antiphospholipid antibodies (APAs) in the body and arterial or venous thrombosis and/or complications during pregnancy [1]. In pregnancy, these antibodies can cause miscarriage, intrauterine growth restriction (IUGR) and/or fetal death with pre-eclampsia [2]. According to the International Consensus guidelines for APLS (Sydney criteria, 2006), in order to confirm APLS at least one clinical criterion (vascular thrombosis or pregnancy morbidity) and at least one of the laboratory criteria should be fulfilled .Under clinical criteria, vascular thrombosis can be venous, arterial or micro vascular and confirmed by an objective validated criteria without any evidence of inflammation in vessel wall and the pregnancy morbidity can be: (1) one or more unexplained deaths of morphologically normal fetuses at or beyond the 10th week of gestation, or (2) one or more premature births of a morphological mother before the 34th week of gestation due to severe pre-eclampsia (3) placental insufficiency< 34 weeks or (4) three or more consecutive spontaneous miscarriage before the 10 weeks where maternal anatomical, hormonal causes and paternal chromosomal causes have to be excluded [3,4]. Laboratory evidence must be in two or more occasions with 12 weeks apart. It can be anticardiolipin IgG and/or IgM antibody in medium and high titers (> 40, or above the 99th percentile) or lupus anticoagulant in plasma and anti b2 glycoprotein I antibody IgG and/or IgM in serum plasma present in titer more than 99th percentile [3, 4].

Goal

The aim of the study is to get a clear view and evaluation about the pregnancy outcomes in women APLS with and without proper therapeutic management in Srilanka.

Material and methods of research

The analysis and generalization of modern medical scientific literature on this topic. All the necessary data was obtained from the faculty of medicine, University of Colombo based on the patients visited to the Castle street hospital, Colombo from 2016–2022. Statistical analysis was carried out using non-parametric criteria – χ^2, $P < 0,005$.

The results of the research and their discussion

145 women were recruited for the research activity. There were about 646 gestations in 145 women. Among them 146 (22,6 %) received specific treatment, 500 patients didn’t receive

it. In the preceding pregnancies without specific treatment, the rates of early miscarriage were 299 (59,8 %), late miscarriage was 129 (25,8 %), intrauterine death was 39 (7,8 %) and live birth was 33 (6,6 %). When there was no thrombosis or no miscarriage or no previous adverse pregnancy outcome aspirin 150 mg once a day (o.d) from preconception was given. If there was previous thrombosis and patient was on maintenance warfarin, transfer to aspirin and LMWH (enoxaparin 40 mg two times a day (b.d) as soon as pregnancy is confirmed. If not on warfarin, aspirin 150 mg o.d from preconception and commenced LMWH (enoxaparin 40 mg) once pregnancy confirmed. In recurrent miscarriage (< 10 weeks), with no prior anticoagulation therapy, aspirin 150 mg o.d from preconception and prior miscarriage with aspirin alone, aspirin 150 mg o.d from preconception and LMWH was prescribed once pregnancy is confirmed .Consider discontinuation of LMWH at 12 or 20 weeks' gestation if uterine artery waveform is normal. Assess risk for thrombosis, in late fetal loss, neonatal death or adverse outcome due to preeclampsia or abruption, aspirin 150 mg o.d from preconception and LMWH (enoxaparin 40 mg o.d) once pregnancy confirmed. After the proper treatment the rates of early miscarriage were 20 (13,6 %), late miscarriage was 14 (9,6 %) intrauterine death was 4 (2,8 %) and live birth was 108 (74,0 %). The results are graphically represented in the graph (figure 1) below.

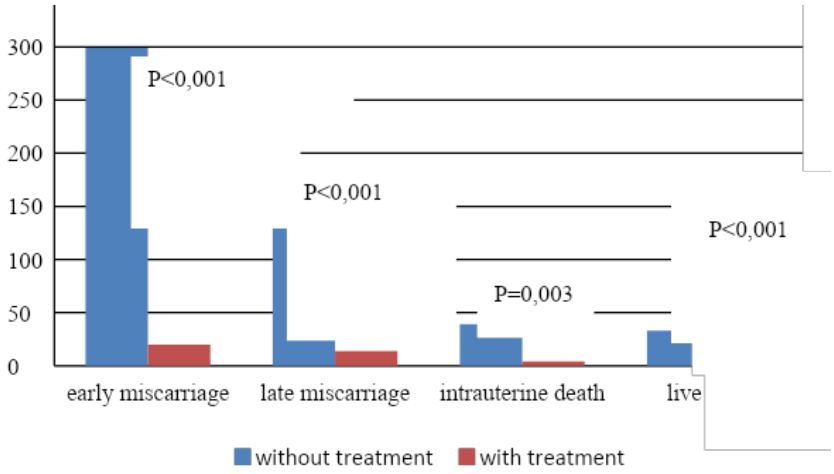

Figure 1 – Pregnancy outcomes in women with APLS with and without treatment

According to the studies, 14,5 % had a previous history of thrombosis which satisfies the diagnostic clinical criteria for APLS. Deep vein thrombosis was the commonest thrombotic event reported in our study group. In a similar study on primary antiphospholipid syndrome in Latin America, the most common thrombotic problem was deep vein thrombosis. In our research it is noted that most of them had specific treatment started only in their fourth pregnancy after previous three miscarriages and an improvement in outcome of pregnancy was noted after following the proper therapeutic management.

Conclusion

Obstetric APLS is a worldwide major problem with very high pregnancy complications for both mother and fetus. According to our research, pregnant women with clinical antiphospholipid syndrome when following the proper therapeutic management, the live birth rate of 7,0 % in the previous pregnancy resulted in live births of 74,0 % ($P < 0,001$) at the current pregnancy. Low dose aspirin and heparin in medical management improve the chances of a woman with APLS to have a live baby without a miscarriage. Therefore, it is a must for the Srilankan government and the health sector to diagnose patients with APLS as early as possible and provide proper therapeutic management.

LITERATURE

1. Research trends and frontiers on antiphospholipid syndrome: A 10-year bibliometric analysis / T. Wu [et al.] // Front Pharmacol. – 2022. – Vol. 1, № 13. – P. 1035229.

2. Anti-phospholipid antibodies in COVID-19 are different from those detectable in the anti-phospholipid syndrome / M. O. Borghi [et al.] // Front. Immunol. – 2022. – Vol. 1, № 11. – P. 584241.

3. Increased risk of thrombosis in antiphospholipid syndrome patients treated with direct oral anticoagulants. Results from an international patient-level data meta-analysis / V.Dufrost [et al.] // Autoimmun. Rev. – 2018. – Vol. 17, № 10. – P. 1011–1021.

4. Pregnancy outcomes of antiphospholipid syndrome: In a low resource South Asian setting / C. N. Wijeyaratne [et al.] // Obstet Med. – 2016. – Vol. 9, № 2. – P. 83–89.

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PUBLIC AWARENESS ABOUT GESTATIONAL DIABETES MELLITUS IN SRI LANKA

Introduction

Gestational Diabetes Mellitus (GDM) is defined as «carbohydrate intolerance resulting in hyperglycemia of variable severity with the onset of first recognition during pregnancy». It is one of the most common metabolic disorders that occur during pregnancy and affects up to 12,9 % of pregnancies worldwide [1], with short- and long-term consequences if undiagnosed or untreated. There is an exponential rise in the prevalence of diabetes throughout the world, with South Asia being its focal point. Its incidence has increased in South Asia by 111 % in the past 15 years, when compared to other continents, which have less than a 50 % rise [2]. Hence, Sri Lankans are clearly a high-risk population. It leads to multiple perinatal complications in both mother and fetus. There is also the future risk of developing type 2 diabetes mellitus (DM) among the mothers and a long-term risk of developing obesity, hypertension, and type 2 DM among the babies of GDM mothers.

Knowledge of GDM, especially its risk factors and complications, is essential to its management and preventive strategies, thereby reducing its burden. Studies conducted worldwide to assess GDM knowledge have shown different results. A multicenter study among women attending antenatal care (ANC) in India showed that very few (6,3 %) of the pregnant women were aware of GDM [3]. Conversely, Bhowmik and colleagues in 2018 in Bangladesh showed that 81,8 % of their study participants were aware of GDM; however, the knowledge score was low [4]. A United States study [5] among 85 pregnant women showed that none could correctly identify GDM risk factors.

Several studies have assessed GDM knowledge worldwide; most studies were conducted among pregnant women. Very few assessed GDM knowledge among the general population, and even fewer studies included males. Fathers' involvement in maternal care has been found to increase early ANC visits and positively affect both maternal and child health [6]. Furthermore, knowing a population's GDM knowledge level is essential for implementing preventive strategies.

Goal

The present study is aimed to investigate the gestational diabetes mellitus (GDM) knowledge status, level, and source of knowledge among the Sri Lankan community and to