



CASE STUDY

SUCCESSFUL OUTCOME OF PREGNANCY IN A CASE OF RECURRENT PREGNANCY LOSS WITH PROTEIN S DEFICIENCY

*Dr. Ganesh Bharaswadkar and Dr. Nity Jose

ESIC Post Graduate Institute of Medical Sciences and Research and Hospital, Mumbai

ARTICLE INFO

Article History:

Received 21st December, 2017
Received in revised form
27th January, 2018
Accepted 09th February, 2018
Published online 30th March, 2018

Keywords:

Recurrent Pregnancy loss
Thrombophilia, Miscarriages, Heparin
Protein S Deficiency.

ABSTRACT

We are presenting a case of fourth Gravida with history of previous three spontaneous late first trimester miscarriages. She was diagnosed with protein S Deficiency in non-pregnant state after screening for thrombophilia. The prophylactic therapy with low molecular weight heparin along with Aspirin was introduced from the 6th week of gestation after fetal cardiac activity was appreciated on ultrasound & continued for whole of the gestation. She underwent planned caesarean section at 38 weeks of gestation resulting in the delivery of a healthy male new born of 2.6 kg body weight. Prophylactic Low Molecular Weight Heparin was continued for 6 weeks post partum to avoid thrombo-embolic complications.

INTRODUCTION

The importance of the case lies in unveiling of the cause of repeated miscarriages as thrombophilia & subsequent specific treatment for the same leading to a successful outcome. Through this case report, I wish to convey significance of evaluation of such cases by routinely doing thrombophilia screen, as it appeared to be the sole cause of recurrent pregnancy loss in the mentioned case.

Case Presentation

Mrs Minakshi Tiwari, 27 yrs old female fourth gravida with history of previous 3 first trimester abortions, came to us at 7 wk gestation. In her past obstetric history, she has presented in 8-10 weeks pregnancy with bleeding PV followed by spontaneous expulsion of fleshy mass resulting in complete abortion in all three previous losses. She belonged to a lower middle class family. In her family history; her sisters had a similar obstetric history of multiple spontaneous pregnancy losses which were not evaluated. She was thoroughly evaluated for all possible causes for recurrent losses like Genetic, Endocrine, Infective, Autoimmune, and Structural Etc. But out of all, she was found to have Protein S Deficiency on Thrombophilia screening done in non-pregnant state. The prophylactic therapy with low molecular weight heparin along

With Aspirin was introduced from the 6th week of gestation after confirming fetal cardiac activity on ultrasound. She underwent planned caesarean section at 38 weeks of gestation resulting in the delivery of a healthy male newborn of 2.6 kg body weight. Low molecular weight heparin was continued for 6 weeks postpartum to avoid Thrombo-Embolic Complications.

Investigations

- Protein S activity Levels- 30 signifying low levels (Normal range-55-123)
- Protein C levels- Normal
- Factor V Leiden mutation-nil.
- Antinuclear Antibody titres - Absent.
- TORCH Titres-Not significant
- Blood Sugar Levels-Within Normal Limits
- Thyroid Profile-Within Normal Range
- Serum Progesterone levels-Normal
- USG Pelvis-No Structural uterine abnormality.

Differential Diagnosis

- Antiphospholipid Syndrome,
- Inherited Thrombophilia
- Acquired Thrombophilia,
- Antithrombin III Deficiency, and
- Antiphospholipid Antibody Syndrome
- Hyperhomocystinemia

*Corresponding author: Dr. Ganesh Bharaswadkar,
ESIC Post Graduate Institute of Medical Sciences and Research and
Hospital, Mumbai

Obstetric Management, Outcome and Follow-Up

The prophylactic therapy with low molecular weight heparin along with Aspirin was introduced from the 6th week of gestation after fetal cardiac activity was appreciated on ultrasound. She underwent planned caesarean section at 38 weeks of gestation resulting in the delivery of a healthy male new born of 2.6 kg body weight. . She was advised to continue with low molecular weight Heparin for further 6 weeks post partum with the objective of avoiding thromboembolic complications in the puerperium secondary to her thrombophilia status.

DISCUSSION

Thrombophilia represents acquired and/or genetic conditions that predispose patients to both venous and arterial thromboembolic events. Pregnancy is a hypercoagulable state, and thromboembolism is the leading cause of ante partum and postpartum maternal morbidity & mortality. Deficiencies in protein S, protein C, and antithrombin can lead to a hypercoagulable state. Current understanding indicates that a combination of risk factors, including multiple inherited thrombophilic defects associated with secondary hypercoagulable states, have a particularly strong association with adverse pregnancy outcome. Similar case was published in The Journal of Obstetrics and Gynecology of India, December 2012, volume 62, Issue 1 Supplement, pp 21-22. By Dr.D.M Lalan, Dr.M.J.Jassawala, Dr.S.A. Bhalerao.

Learning Points/Take Home Messages

- Evaluation for thrombophilia,
- Adequate prophylactic and substitution therapy with Low molecular weight Heparin is the successful tool for the prevention of possible maternal complications and pregnancy itself in our patient with inherited thrombophilia.
- Accompanied with regular obstetrics assessment and follow-up of haematological parameters during pregnancy

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