



SDI Review Form 1.6

Journal Name:	International Blood Research & Reviews
Manuscript Number:	Ms_IBRR_47224
Title of the Manuscript:	Assessment of Protein C and Protein S in Pregnancy loss victims
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The study is about the assessment of Protein C and Protein S in Pregnancy loss victims. And it was found that protein C concentration for the pregnancy-loss subjects was significantly lower than that of the normal pregnancy.</p> <p>There is conflicting results in the literature. And some major revisions are needed.</p> <ol style="list-style-type: none"> 1) Can the authors make comment about the reason of why protein C deficiency is associated with the pregnancy losses? 2) Why protein S deficiency is not associated with pregnancy losses? 3) Is there any information about the protein S and C levels in normal pregnant women? 4) The conclusion part must be re-written. Please write only your findings! 5) Please write the shortcomings of the study before conclusion! 	<p>Protein C and Protein S are natural anticoagulants (Parand <i>et al.</i>, 2013).</p> <p>When activated, Protein C inhibits clotting by proteolytic cleavage (and thus deactivation) of factors Va and VIIIa, using protein S as a co-factor (Esmon, 2001). Factors Va and VIIIa are important in the coagulation cascade and their inhibition helps to prevent thrombosis, thereby helping to keep blood in a fluid state. Thus deficiencies of Protein C and Protein S results in the development of a procoagulant state (Singla and Jain, 2018), thus worsening the procoagulant state already existing in pregnancy. Protein C equally enhances the viability and growth of trophoblast cells (Iserman <i>et al</i>, 2003), thus ensuring foetal survival. Its deficiency leads tp foetal loss. This shift to a procoagulant state is evidenced by a reported shift in the thromboxane/prostacycline ratio in favour of thromboxane which is a known prothrombotic agent, resulting in vasospasm and platelet aggregation in the trophoblasts, eventually leading to the development of microthrombi and placental necrosis (Singla and Jain, 2018).</p> <p>2. The reason why Protein S was not significant amongst pregnancy losses could be a s a results of the fact that Protein S and C deficiency is inherited independently, so in this study the deficiency of C in pregnancy has nothing to do with Protein S.</p> <p>Combined deficiencies are rare and come with increased and earlier onset of risk of thrombosis (Chaudhari <i>et al.</i>, 2017)</p> <p>3. There is no information regarding levels of Protein C and S in normal Pregnant women, although there is suggestions that their levels in pregnant state can be lower. Normal values of Protein S for Caucassians is 15-25µ/ml while that for Protein C is 3.9-5.4µ/ml. But the respective levels are lower in</p>



SDI Review Form 1.6

		<p>the pregnant state as well as in Black Africans (Jerrard-Dune <i>et al</i>, 2003). Aside, Momodu and Buseri (2015) attributed inconsistencies in the reference values of these anticoagulants to differences in the sensitivities and specificities of the reagents used as well as to assay techniques. In this study assay was done with ELISA technique and assays below 2.5µ/ml for Protein S and 0.7µ/ml for Protein C were excluded from the study.</p> <p>4. The conclusion part has been rewritten to focus only on the results of our findings</p> <p>5. The limitations of the study includes, short duration the study was carried out, availability of victims of pregnant loss for the study, some subjects declined to participate in the study.</p>
Minor REVISION comments		
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	