Review of: "Hematobiochemical variability and predictors of new-onset and persistent postpartum preeclampsia"

mohammadreza ardalan

Potential competing interests: The author(s) declared that no potential competing interests exist.

I read with great interest the article by" Linda Ahenkorah Fondjo et al in their article"*Hematobiochemical variability and predictors of new-onset and persistent postpartum preeclampsia*" they have tried to define two terms, antepartum preeclampsia(PE)that could be extended even to post-partum period (PPE) and disappears thereafter and new-onset postpartum PE (NOPPE). In the second one a normotensive pregnant woman develops PE de novo after delivery. They concluded that NOPPE and PPE are different pathological conditions and require different clinical management. As the antepartum PE is largely considered as a disorder of abnormal placentation, with subsequent release of abnormal levels of anti-angiogenic and vasoactive molecules into maternal circulation, such as soluble fms-like tyrosine kinase 1 (sFlt-1) and decreased serum levels of placental growth factor (PlGF). In this study, the levels of sFlt-1 were not different between the NOPPE women and the normotensive controls, but it was significantly lower than the levels in PPE patients. Post-partum period is a vulnerable period, and the special time for presentation of disease such as Postpartum hemolytic uremic syndrome (PHUS), that is defined as a thrombotic microangiopathy (TMA) following a normal delivery after a long symptom-free interval that could about one month (1) it is characterized by microvasculature occlusion of the kidney, resulting in acute renal failure. The relative deficiency of ADAMTS-13, a metalloprotease that cleaves ultra-large von Willebrand factor (VWF) is responsible for the disease, and it has been proposed that during the postpartum period, the pregnancy period protection conferred by the overexpression of Decay Accelerating Factor and CD59 is lost after placental delivery. (2)

AFLP that present with acute renal failure and persistent hypoglycemiamay, due to disordered maternal mitochondrial fatty acids metabolism could also happens after delivery. (3)

It does not look like that that NOPPE and PPE are different pathological conditions that require different clinical attention. Placental derived factor that makes the utrine and systemic circulation refractory to various vasopressors, including angiotensin II, endothelin, neuropeptide Y, norepinephrine, epinephrine, may drops after deliver. As the half-life of different vasoactive substances are different post-partum period could be a vulnerable period of potential imbalance with dominancy toward the vasoconstrictor ones. And the condition could be considered as a continuum with different time of presentation.

Mohammadrewza Ardalan. MD

Nephrology research center

Tabriz University of Medical Sciences

Tabriz-Iran

Email: ardalan34@yahoo.com

References;

1.Weiner CP. Thrombotic microangiopathy in pregnancy and the postpartum period. Semin Hematol 1987;24:119-29

2.Bruel A, Kavanagh D, Noris M, Delmas Y, Wong EKS, et al F. Hemolytic Uremic Syndrome in Pregnancy and Postpartum. Clin J Am Soc Nephrol. 2017 12(8):1237-1247

3. Al-Husban, N., Al-Kuran, O. & Al Helou, A. Postpartum acute fatty liver of pregnancy: a case report. J Med Case Reports **12,** 67 (2018)pregnancy: a case report