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Pravastatin for the prevention of adverse pregnancy outcome: preeclampsia and more?

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Letter to the Editor

Professor Asif Ahmed has written to us about our the publication of our report of the use of pravastatin to prevent fetal death in a patient with perivillous fibrin deposition. (1) Professor Ahmed brought to the attention of the authors that his team published in 2007 a paper which was the first to propose, based on in vitro experiments, the use of a statin for the treatment of preeclampsia.(2) The statins used in that study were simvastatin, fluvastatin and mevastatin, all of which reduce sFlt-1 release by human umbilical vein endothelial cells when stimulated by VEGF-E.

Professor Ahmed has indicated to us that his studies in 2007 were the basis for his proposal of a randomized clinical trial of statins to treat preeclampsia (“A Proof of Principle, Double-Blind, Randomised, Placebo-Controlled, Multi Centre Trial of pravaStatin to Ameliorate Early Onset Pre-eclampsia”; StAmP Trial – Grant Holder: Asif Ahmed).(3) Our case report

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cited 2 reviews by Professor Ahmed on the subject of statins and preeclampsia (references 66 and 68) – both of these had discussed and cited the paper published in 2007.(4,5)

The use of pravastatin in our case was to prevent recurrent fetal death in a patient with massive perivillous fibrin deposition.(1) Our patient did not have a history of preeclampsia or develop preeclampsia in the index pregnancy. We believe that an anti-angiogenic state may be a mechanism of disease for several obstetrical syndromes.(6–8)”

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