Immunohistochemical expression of von Willebrand factor in the preeclamptic placenta

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Preeclampsia is a high-prevalence systemic pregnancy disorder associated with maternal and foetal mortality. Its pathogenesis is unknown, but it is thought that oxidative stress and endothelial dysfunction may play a fundamental role. Von Willebrand factor (vWF), a marker of endothelial cell injury, can be found in different cells and zones of the placenta. To determine the differential immunoexpression of vWF at different tissue types of preeclamptic placenta and endothelial dysfunction markers at maternal serum of preeclamptic pregnancies. A case-control study was performed on a population of pregnant women with preeclampsia (n = 14), and normal pregnancies (n = 8). Placental and blood plasma samples were withdrawn at delivery. Immunohistochemical vWF expression in the placental tissue was determined. Endothelial dysfunction was assessed through plasminogen activator inhibitor (PAI) 1 and 2 ratio and vWF concentration in maternal plasma. P values less than 0.05 were considered statis