HYPERTENSION

sFlt-1 removal seems to be beneficial in women with pre-eclampsia

Researchers report that removal of soluble Fms-like tyrosine kinase-1 (sFlt-1) by apheresis might safely prolong pregnancy in women with pre-eclampsia. sFlt-1 is an antiangiogenic protein with a putative role in the pathogenesis of this disease.

In their recent pilot study, Ravi Thadhani and colleagues used a plasma-specific dextran sulphate apheresis column to remove sFlt-1 from the circulation of 11 women with very preterm pre-eclampsia (23–32 weeks gestation). They found that a single session of apheresis reduced circulating sFlt-1 levels by a mean of 18%

and was associated with a mean post-treatment reduction in protein-to-creatinine ratio of

Among the six women who underwent one session of apheresis, pregnancy continued for a mean of 8 days after admission, compared with a mean of 15 days in the five women who received two or three apheresis treatments. By contrast, pregnancy continued for a mean of only 3 days after admission in 22 untreated contemporaneous women with pre-eclampsia. No major adverse effects of apheresis treatment were observed in the mothers or their infants.

"Each day that pregnancy can be prolonged in women with very preterm pre-eclampsia enables the baby to mature and potentially reduces complications in the neonate," says Thadhani. "We now need to perform a randomized trial to confirm our findings and more closely assess the safety of sFlt-1 removal in these patients."

Ellen F. Carney

Original article Thadhani, R. et al. Removal of soluble Fms-like tyrosine kinase-1 by dextran sulfate apheresis in preeclampsia. *J. Am. Soc. Nephrol.* doi:10.1681/ASN.2015020157

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