Increased plasma adrenomedullin in women with recurrent pregnancy loss.

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OBJECTIVE: To evaluate vascular changes and uterine perfusion in women with recurrent pregnancy loss.

METHODS: We measured plasma levels of adrenomedullin of 100 pregnant women in the midluteal phase of a nonpregnant cycle (control group: n = 62; recurrent pregnancy loss group: n = 38). We measured the pulsatility index (PI) in the uterine arteries by transvaginal pulsed Doppler ultrasonography at the same time.

RESULTS: The plasma level of adrenomedullin in women with recurrent pregnancy loss (5.6 +/- 1.9, mean +/- standard deviation) was significantly higher (P >.001) than that in control women (3.6 +/- 1.7). Uterine arterial PI of women with recurrent pregnancy loss (2.70 +/- 0.47) was significantly higher (P >.001) than that in control women (2.09 +/- 0.39). Plasma level of adrenomedullin had a significant positive correlation with uterine arterial PI both in the control group (r =.58, P <.001) and in the recurrent pregnancy loss group (r =.78, P <.001). Both plasma adrenomedullin concentration (7.2 +/- 2.3) and uterine arterial PI (3.06 +/- 0.36) were significantly high in women with antiphospholipid antibodies.

CONCLUSION: Plasma adrenomedullin may serve as a useful biochemical marker for recurrent pregnancy loss caused by impaired uterine perfusion.

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