Ovarian and placental P450-aromatase activity during second half of ovine pregnancy

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ABSTRACT

Sokhtehzari A, Alirezaei M, Mirzaei A, Neamati Sh., Ovarian and placental P450-aromatase activity during second half of ovine pregnancy, Online J Vet Res., 15 (4): 381-389, 2011. Placental and ovarian P450-aromatase activity was assayed by ELISA and protein Lowry test from cotyledons, caruncles, corpus lutea and follicular fluid from 25 sheep carcasses at different stages of pregnancy. There were significant differences in aromatase activity between organs at the 3rd and 4th month of pregnancy but none during the last month of pregnancy. Each month of pregnancy was associated with a decrease of 0.49 Pmol/mg/30 minute in aromatase in corpora lutea, 0.04 in caruncles but an increase of 0.09 in cotyledons. At the 3rd month of pregnancy, aromatase activity in follicular fluid was greater than at the 4th month. These results suggest that ovarian and placental aromatase activity changes during the 2nd half of ovine pregnancy but declines in follicular fluid.