

Long-term testosterone treatment during pregnancy does not alter insulin or glucose profile in a sheep model of polycystic ovary syndrome

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© 2017, © 2017 Informa UK Limited, trading as Taylor & Francis Group. The administration of testosterone to pregnant sheep to resemble fetal programming of the polycystic ovary syndrome could alter other hormones/factors of maternal origin with known effects on fetal growth. Hence, we studied the weekly profile of insulin, progesterone and glucose during a treatment with testosterone propionate given biweekly from weeks 5 to 17 of pregnancy (term at 21 weeks) and checked the outcome of their fetuses at 17 weeks of gestation after C-section. Control dams were only exposed to the vehicle of the hormone. The testosterone administration did not cause any significant change in the maternal weekly profile of insulin, progesterone or glucose concentration, although the plasma levels of testosterone in the treated dams were inversely correlated to the levels of progesterone. Testosterone treatment also induced an inverse correlation between mean maternal insulin levels and fetal insulin levels;