



PS116 – Ovarian responses in Santa Ines ewes superovulated with different doses of porcine FSH (FOLLTROPIN-V)

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High variability in superovulatory responses and the occurrence of premature luteal regression in donor animals are the major drawbacks of multiple ovulation and embryo transfer (MOET) programs in sheep. These conditions may be caused in part by the high doses of exogenous FSH used in superovulatory protocols [1]. The aim of this study was to evaluate the effect of various superovulatory porcine FSH (pFSH, Folltropin®-V) doses on the ovarian responses in ewes. This study was performed in Jaboticabal (21°15'18" South and 48°19'19" West) with 29 Santa Inês ewes, which received an intravaginal progesterone-releasing device (CIDR) from Day 0 to Day 8. At the start of the superovulatory treatment and on the day of CIDR removal, a single i.m. injection of 0.5 mL of a PGF2 α analogue (Sincrocio®) was given. Administration of pFSH began 48 hours prior to CIDR withdrawal. The ewes were randomly allocated to one of the three groups: G200 (n=9), G133 (n=10), and G100 (n=10) or animals receiving 200, 133 or 100 mg of pFSH, respectively over the 4-day superovulatory treatment. On Day 6, all ewes received 300 IU of eCG i.m. Ovarian responses were assessed by laparoscopy, approximately six days after ovulations (Day 15). All detectable luteal structures were classified as normal corpora lutea (nCL, colored pink or red, >5 mm in diameter, and protruding above the surface of the ovary) or as inadequate luteal structures (colored pale pink or grey, <5 mm diameter, and showing little or no bulging) [2]. Statistical analyses utilized the software R® and the percentages were compared by the chi-square. It was observed ewes with nCL only (41.37%), iLS only (17.24%) or both structures present (41.37%). The G200 group had a greater proportion of iLS (49.0%) compared with the group treated with 100 mg (19.0%) or 133 mg (31.5%) of pFSH (p<0.001). Further, the G100 exhibited a greater percentage of nCL (81.0%) than the G133 (68.5%) and G200 (51.0%) groups (p<0.001). It can be concluded that the lowest dose of pFSH tested reduced the incidence of premature luteal regression and promoted the formation of apparently healthy CL in superovulated Santa Inês ewes. Hence, the use of low pFSH doses for the multiple-dose superovulatory protocols may potentially increase its efficiency and reduce the cost of MOET.

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