Embryo recovery rate in Santa Inês ewes subjected to successive superovulatory treatments with pFSH

M.F. Cordeiro a, J.B. Lima-Verde a, E.S. Lopes-Júnior a, D.I.A. Teixeira a, L.N. Farias b, H.O. Salle a, A.A. Simplicio b, D. Rondina a, V.J.F. Freitas a, k

a Laboratory of Physiology and Control of Reproduction, Faculty of Veterinary, State University of Ceará, Avenida Paranajuba 1700, Fortaleza CE 60740-000, Brazil
b Brazilian National Goat Research Center (EMBRAPA Caprinos), Sobral-Grojados, Km 4, Sobral CE 62100-000, Brazil
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Abstract

The effect of two successive superovulatory treatments was assessed in 15 Santa Inês ewes synchronized with 50 mg medroxyprogesterone acetate sponges for 14 days and superovulated with 200 IU of porcine FSH (pFSH) in decreasing doses at 12 h intervals during days 12–14 of progesterone treatment. Estrus was observed from 12 h after sponge removal and the ewes in estrus were hand mated with Santa Inês rams of proven fertility. All embryos were recovered by laparotomy 6–7 days after estrus. Treated ewes showed estrus from 24 to 72 h after sponge removal. The time of onset of estrus after sponge removal and the length of estrus were not affected (P > 0.05) by the repetition of treatment. Ewes that failed to superovulate in the first and the second treatment (P > 0.05) were 27 and 40%, respectively. The mean ovulation rate for those ewes responding to treatment was similar (P > 0.05) between the first (9.9 ± 1.1) and the second (11.3 ± 1.9) treatment. There was no significant difference in fertility between the first (53%) and second (40%) treatment. Among those fertilized, viable embryos were detected for 78% in the first treatment and 64% in the second treatment (P > 0.05). It was concluded that Santa Inês ewes respond to superovulatory regimes with pFSH and the treatment may be repeated for at least two times.

Keywords: Sheep; Santa Inês; Superovulation; Embryo; Santa-in

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