Successful transcervical uterine flushing in Morada Nova sheep

Sucesso na lavagem uterina transcervical em ovelhas Morada Nova

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Animal surgery procedures are being progressively restricted worldwide in the context of embryo transfer. In small ruminants it becomes evident, and the needs for development of alternative and efficient non-surgical techniques for embryo transfer had been emphasized. The objective of this study was to check the efficiency of a combination of drugs to promote cervical relaxation for transcervical uterine flushing in a small-sized breed of sheep. The so called Embrapa's protocol for cervical relaxation in sheep was tested in Morada Nova sheep. The study was carried out on September 2014 at Embrapa Southeast Livestock experimental station in São Carlos -SP, Brazil. Four pluriparous non-lactating and non-mated ewes were randomly chosen from the 70 females herd. They received 37.5 µg d-cloprostenol and 1 mg estradiol benzoate i.m. 18 h before uterine flushing plus 50 IU of oxytocin i.v. 20 min before uterine flushing. Ewes were prepared for transcervical uterine flushing as reported earlier for goats (Fonseca et al.; Small Rumin. Res., 111:96-99, 2013). Preparation included superficial sedation, epidural and cervical anesthesia, introduction of Collin vaginal speculum into the vagina and cervical visualization. Pozzi forceps were changed by a special non-traumatic forceps inserted into and under cervical opening when cervix was immobilized and gently tract back. Then, a number 8 sterile urethral catheter coupled to a metal mandrel was used to bypass cervical rings. Resistance was overcome after total transposition of rings. Mandrel was removed and the catheter coupled to closed circuit with flushing medium. A total of 80 mL of flushing medium was injected per ewe. Data were reported in a descriptive form. Cervical transposition was performed in all ewes. The total time spent since speculum introduction and cervical transposition was less than five minutes. All infused volume was recovered in three ewes, and the other ewe allowed recovering 70 mL. These preliminary results encourage the use of the Embrapa protocol for cervical relaxation in Morada Nova sheep. If consolidated, these findings possibly will give support to multiple ovulation and embryo transfer programs to this special and important Brazilian sheep breed.

Keywords: cervical dilation, non-surgical embryo transfer, Morada Nova, sheep. *Palavras-chave:* dilatação cervical, transferência de embriões não cirúrgica, Morada Nova, ovino.

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