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Lifespan of a luteinised ovarian cyst, hormonal profile and uterine ultrasonographic appearance in a cyclic nulliparous Serrana goat

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Introduction

The anovulatory persistent follicles were classified as ovarian cysts when they reach, at least, 10 mm in diameter and persist more than 10 days.

In the present work, the genesis, evolving and spontaneous regression of a luteinised ovarian cyst in a cyclic nulliparous Serrana goat, during the breeding season, were presented.

Case presentation

Daily ovarian and uterus transrectal ultrasonography scanning (USS) was performed during two consecutive (induced and natural) oestrous cycles, in a cyclic nulliparous Serrana goat.

Blood samples were collected every 4 h during the first 24 h after onset of oestrus, detected by a vasectomised buck, to evaluate plasma LH levels by radioimmunoassay (RIA). Plasma progesterone (P4) levels were also evaluated, twice a week, by RIA.

After first oestrus (induced with 50 µg of cloprostenol, IM), sexual behaviour and mount acceptance were observed, but the preovulatory LH peak and ovulation were not detected.



Fig. 2 – Ultrasonographic view of uterine sagittal plans. A1- day 15 after first oestrus; A2- day 11 after the second oestrus (diestrus); BI- Bladder.

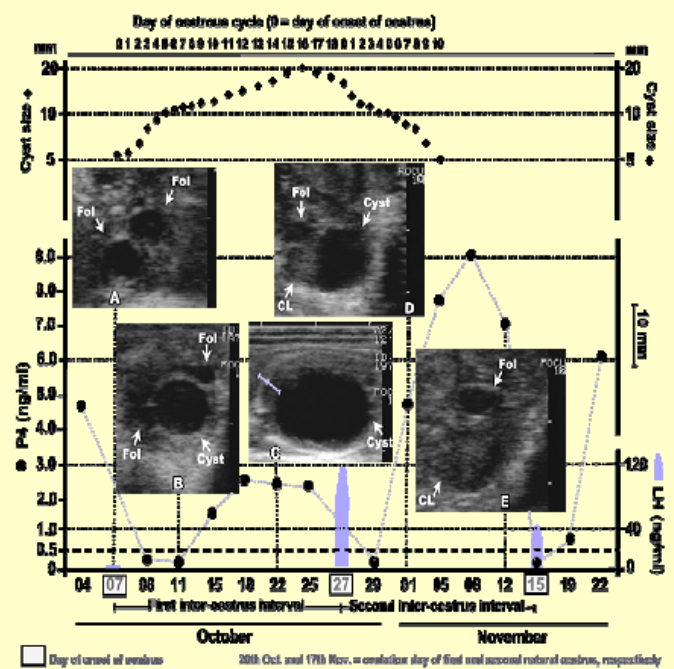


Fig. 1 – Lifespan of luteinised cyst.

The luteinisation of a persistent follicle was observed by USS and the plasma P4 levels increased from 0.2 ng/ml to 2.5 ng/ml. The ovarian cyst reached 20 mm in diameter, 16 days after induced oestrus (Fig. 1).

On 19th day, a natural oestrus with a LH peak (109.2 ng/ml) and ovulation was observed. Corpora lutea was visualized in presence of cyst that decreased to 5 mm on 10th day of the second oestrous cycle, when P4 levels reached 9.0 ng/ml.

A heterogeneous appearance of uterine horns was observed, by USS, in presence of the cyst, but not during the dioestrus of the second oestrous cycle (Fig. 2).

Conclusion

This case showed the occurrence and spontaneous recovery of a luteinised ovarian cyst associated with low (subnormal) plasma P4 levels and heterogenic texture of uterus in a young cyclic goat.