P 204 | Failure to conceive in deslorelin-induced estrous bitches with regard to removal of hormone implants after ovulation

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Removal of a GnRH agonist deslorelin implant either before or during ovulation in deslorelin-induced estrous bitches is suggested because prolonged administration of the agonist may cause luteal failure secondary to pituitary down-regulation. This study aimed at investigating the effect of a 4.7 mg Deslorelin (Suprelorin®) on estrous induction and the conception rate after removing the implant 72–96 h post-ovulation to ensure that the entire ovulation process was completed. Ovulation began when serum progesterone reached 5–6 ng/ml. The implants were inserted subcutaneously in the umbilical area in 5 intact anestrous beagles (1.5–3 years). In all bitches, vaginal cytology was abruptly changed on day 3 and estrous signs were observed on day 5 post-implantation. Ovulation occurred on day 11.4 ± 0.9 post-implantation (11–13 days) (ovulation rate = 100%). Transcervical artificial inseminations with chilled semen (>75% sperm motility) using Scandinavian catheter were performed on the 2nd and 4th day post-ovulation. Pregnancy was confirmed on day 35 post-AI by transabdominal ultrasonography and serum relaxin test (WITNESS® Relaxin). No fetuses were detected and relaxin tests were negative (pregnancy rate = 0%). Progesterone levels remained higher than 1 ng/ml for approximately 57 days. Unsuccessful pregnancy outcome possibly related to delayed removal of the implants. Physiological changes in the oviduct and/or uterus associated with time of implant removal should be further investigated.

P 205 | Case report: ovarian fibroma in a mare – hormonal considerations

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History: A large ovary is incidentally palpated in a 13 year-old mare presented for colic with an alimentary obstruction. Clinical investigation: There was no uterine oedema. The left ovary was large (5.8 cm), hard and ultrasonography showed a large echogenic area (5 cm) with some small follicles. A corpus luteum and small follicles were present on the right ovary. Testosterone was below 25 pg/ml; estradiol below 5 pg/ml; progesterone 1.98 and 14.87 ng/ml 2 days later. Hormonology didn't confirm the clinical suspicion of an ovarian tumor. At control 6 weeks later, no changes on the left ovary were observed; the right ovary presented a corpus luteum and some small follicles. Steroids values were: progesterone = 8.7 ng/ml; testosterone below 25 pg/ml; Anti-Mullerian Hormone (AMH) = 2.21 ng/ml. Treatment: Unilateral ovariectomy (left ovary) was performed by laparoscopy on the standing sedated mare. The surgery and postoperative period were uneventful. Histopathology: A well-circumscribed neoplasm, partially encapsulated is identified. The ovarian stroma is collagenous. Small hemorrhages and cystic areas containing basophilic material are observed. The tumor cells have thin cytoplasm with elongated, regular, hyperchromatic nuclei and inconspicuous nucleoli. Mitotic figures are rare (<1/10 fields). Diagnosis: Benign Ovarian Fibroma Discussion: The aim was to describe equine ovarian fibroma. In contrast with Granulosa Theca Cells Tumors (TGCT) who are secreting steroids, inhibin and AMH in the mare and the woman, human ovarian fibroma don't produce AMH. This case also suggests that equine ovarian fibroma are endocrinally inactive, thus preserving cyclicity.

P 206 | Aquaporins 3 and 7 as cryotolerance markers in boar semen

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Although recent studies have reported that aquaporins 3 and 7 (AQP3 and AQP7) are present in boar sperm, their putative relationship with the sperm ability to withstand freeze-thawing procedures remains untested. In the present study, we aimed at determining whether the relative amounts of AQP3 and AQP7 assessed in refrigerated boar sperm are related to their cryotolerance. With this purpose, 17 ejaculates were used in the current study. The sperm motility and membrane integrity were evaluated through a computer assisted sperm analysis system (CASA) and a sperm viability kit (SYBR14/PI) for fluorescence microscopy. Proportions of total motile sperm and viable sperm in all fresh semen samples were higher than 85%. The ejaculates were split into two aliquots. One was used to determine the relative amounts of AQP3 and AQP7 in refrigerated semen through immublotting, whereas the other was cryopreserved following the Westendorf method (0.5 ml straws). At 30 and 240 post-thawing, sperm motility and viability were evaluated as aforementioned. After checking the normality and homogeneity of variances, Pearson and Spearman correlations were calculated between the relative AQP-levels and sperm motility and viability. While the relative amounts of AQP3 in refrigerated semen were found to be significantly correlated with sperm viability evaluated at 30 and 240 min post-thawing, those of AQP7 were only found to be significantly correlated with sperm viability determined at 240 min post-thawing. We can conclude that AQP3 and AQP7 appear to be related with the boar sperm resilience to withstand cryopreservation and that their relative amounts in refrigerated semen may predict the sperm cryotolerance before undertaking freeze-thawing procedures.