EDV was $0.12 \pm 0.09$ and the IR and IP was $0.57 \pm 0.24$ and $0.97 \pm 0.5$, respectively. The coefficient of variation was $46.7\%$ for SPV, $68.36\%$ for EDV, $41.64\%$ for RI and $52.11\%$ for PI. This result represents the flow in the uterine artery, but the high coefficient of variation must represent different flow parameters according to the sample Doppler volume in the uterine artery.

**P140**

Use of PGF$_{2\alpha}$ and eCG in CIDR based estrous synchronization in nulliparous goats during breeding season

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Efficacy of PGF$_{2\alpha}$ and eCG administration in CIDR based estrous synchronization in nulliparous Allepo goats during breeding season was investigated. Nulliparous goats ($n = 239$) were randomly allocated into four groups. In all groups, intravaginal progesterone device (Eazi-Breed™ CIDR®, 0.33 g progesterone; Zoetics Animal Health) was inserted for 11 days. On day 9, 10 and 11, PGF$_{2\alpha}$ (Dyonite³, 1 ml, i.m., Zoetics Animal Health) and eCG (Chrono-Gest® 400 IU, i.m., MSD Animal Health) were administered in Groups I, II and III. In Group IV (Control), PGF$_{2\alpha}$ and eCG were not injected. Two bucks were introduced into 10–15 goats in each pen 3 h after CIDR removal for 25 days. Estrous expression in subset of animals ($n = 67$) was observed. Pregnancy rates determined with transabdominal ultrasonography 39–40 days after breeding. Time intervals (hour) between CIDR removal and breeding did not differ ($p > 0.05$) among Groups I (20.8 ± 1.2), II (18.7 ± 1.0), III (17.8 ± 1.3) and IV (18.0 ± 1.2). Pregnancy rates did not differ ($p > 0.05$) among Groups I (90%; 54/60), II (90%; 54/60), III (89.8%; 53/59) and IV (91.7%; 55/60). In conclusion, no effect of PGF$_{2\alpha}$ and eCG administration in CIDR based estrous synchronization protocol was observed based on estrous expression and pregnancy rates in nulliparous Allepo goats during breeding season.

**P141**

The use of antibiotics in elective caesarian section for teaching of veterinary students in cows

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Final year students of the Veterinary Faculty perform an elective caesarian section (c-section) as part of their Master programme (approved by the ethical committee of the university). For this purpose pregnant heifers and cows (without history of a c-section) were bought. The cows underwent a c-section between 273 and 280 days of pregnancy with two students and an experienced veterinarian. Parturition was induced with corticosteroids based on AI-date, prodomi and progesterone profile. After surgery they were treated with NSAIDS (2 days) and penicillin (3 days). Given the increased risk of retained placenta and metritis in these animals, all cows were given intratrueate antibiotics in the past. Driven by the need to reduce the use of antibiotics, intratrueate treatment was discontinued. There was no change in circumstances of the c-section between groups. The prevalence of retained placenta and metritis, over a 3 year period of elective c-sections ($n = 82$) was calculated for both groups. Retained placenta was present in 10 out of 15 (66.7%) of the intra-uterine treated cows and 20 out of 63 (31.7%) of the un-treated cows ($p < 0.05$). Metritis occurred in 8 out of 15 (53.3%) of the cows with and in 20 out of 67 (29.9%) without intratrueate treatment ($p < 0.05$). Based on the relatively low number of observations and given the suboptimal design of this study, our reserved conclusion is that intratrueate antibiotic treatment of cows that undergo an elective c-section is likely not preventing many cases of retained placenta and metritis.

**P142**

A case of true hermaphroditism in a horse

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True hermaphroditism in horses, is a complex and poorly understood disorder of sexual development characterized by the presence of both male and female gonads as separate organs or in a combined structure called ovotestis. A 3-year-old Spanish nulliparous mare with a history of stallion behaviour and an abnormal reproductive exam was presented at the Equine Clinic of the University of Liège. Externally, a small vulva with an enlarged clitoris was observed. Transrectal ultrasonography showed a thin (<1 cm) uterus, leading to a small heterogeneous structure in the normal place of the left ovary. No structure could be identified in the presumed location of the right ovary. Speculum exam was compatible with a vaginal agenesis, as the cervix opened cranial the urethral meatus. Oestradiol, progesterone and testosterone concentrations were compatible with a stallion’s endocrinology. Gonads were laparoscopically found in the usual location of the ovaries in both flanks and excised. Histopathology of both gonads showed atrophic testicular tissue with hyperplastic Leydig cells. The left gonad also contained ovarian tissue with some scarce primordial follicles. Clitoral enlargement is the first symptom most commonly identified in animals with true hermaphroditism and can be explained by the production of testosterone by the gonads, however, the aetiology of the vaginal agenesis is unknown. True hermaphroditism in horses is generally related to 64XX syndrome with or without SRY gene translocation (impending karyotyping analysis). After 5 days the mare was discharged from the clinic, and in absence of testosterone the stallion behaviour disappeared in a couple of months.

**P143**

The assessment of the influence of the artificial insemination (AI) and semen on the swine oviduct and uterine electromyography (EMG) with telemetry implants method

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The aim of the study was to record swine oviduct and uterine EMG during an AI procedure. Eight non-pregnant pigs were surgically fitted with TL10M3-D70-EEE (DSI) implants positioned between the abdominal muscles, and 3 silicone electrodes placed on the left or right oviduct (isthmus and ampulla) and the corresponding uterine horn. Myoelectrical activity was recorded with the DSI10 analogue output (DSI), combined with PowerLab (ADInstruments). Blood was withdrawn for plasma P4 and LH to monitor during the cycle and early pregnancy. eCG and hCG (Werfaser) were used for estrus cycle synchronization and AI was performed 24 and 48 h after gonadotropin injections. The pigs were slaughtered after the measurements and the correct position of the electrodes was checked. Data were analysed with Kruskal-Wallis followed by Dunn post hoc test. The AI procedure caused a significant increase