Results: There are reports of 21 cases of urolithiasis in small ruminants. Males, being 20 cases in sheep and 1 case in a goat of the Saanen breed. The patient's ages ranged from 2 months to 8 years. All animals received food with high concentrate. 90% (18 cases) were from the Santa Ines breed, 5% (1 case) of the Dorper breed, and 5% (1 case) mixed animal. 76% (16 cases) had obstructive urolithiasis and 24% (5 cases) had non-obstructive. In 62.5% (10 cases) obstructive urolithiasis cases surgery was performed. Of ten surgery cases, 40% (4) were discharged and 60% (6 cases) dead. All non-obstructive cases were treated by the use of anti-inflammatory, fluid and vitamin C and had 100% success.

Conclusions: Urolithiasis is an important disease of order nutritional by intake of high concentrate (phosphorus) and requires attention to a correct feed management. Sheep farming has been greatly affected and the demand for medical care is more frequent in obstructive cases, which have a poor prognosis. The treatment with anti-inflammatory, fluid and vitamin C was effective in non-obstructive urolithiasis cases mainly in early stage of the disease. Financial support FINATEC.

P: 1067
Evaluation of the immune response of goats submitted to road transportation and treated with vitamins A, D and E

Storillo Martins, V.; Souza Nogueira De F.; Lima Silva A.; Nascimento Marques Do P.; Weigl Alves R.; Morgado Alberti A.; Nikolaus J.; Nunes Rocha G.; Mori Satsuki C.; Hagen Carlo Filippo S.; Delta Libera Maria Melville A.; Sucupira Ararige M.
Faculdade de Medicina Veterinária e Zootecnia, Universidade de São Paulo, Brazil

Objectives: Livestock transportation is an unavoidable handling that can trigger stress. Consequences of stress include physiological, behavioral and welfare changes that may compromise the health and production of livestock. Stress increases the production of free radicals, leading to a greater combination of vitamins A and E, which are antioxidants, with vitamin D. The aim of this study was to analyze possible changes and the influence of treatment with vitamin complex A, D and E in immune response of Boer goats subjected to short duration transport.

Materials and Methods: Twenty healthy adult female Boer goats, calved two months before were transported for four hours. They were divided into two groups of 10 animals; G1 received two doses of vitamin complex A, D and E (540000 IU of vitamin A, 160000 IU of D and 160 IU of vitamin E), seven and two days before transportation. G2 received an equivalent volume of saline. Blood samples for leukogram were performed at 14; 7; and 3 days after transportation. Treatment had no influence on M1 33.92 (P<0.0001). Stimulation with PMA results, for G2 in M0 a mean of 937.4 and M1 996.2 (P<0.0001). Stimulation with LPS results, for G2 in M0 a mean of 4741.3 and M1 940,0 (P<0.0001), for G1 in M0 4741,3 and M1 996,2 (P<0.0001). Treatment had no influence on M1 33,92 (P<0.0001). Stimulation with LPS results, for G2 in M0 a mean of 937.4 and M1 996.2 (P<0.0001). Stimulation with PMA results, for G2 in M0 a mean of 937.4 and M1 996.2 (P<0.0001). Results: The objective of this study was to describe the epidemiological, clinical and macroscopic findings of sheep with periodontitis belonging to two properties located in the State of Para.

Materials and Methods: The epidemiological data were obtained during visits to the properties and, for identification of animals with lesions compatible with the disease, were performed the inspection and palpation of the mandible and maxilla of all animals, besides the necropsy of some animals. Results: On the property I were examined 544 sheep; their feeding consisted of grazing on Panicum maximum cv Massai during the day, and supplementation, once a day, with elephant grass (grounded in very fibrous particles of about five centimeters) and barley, as well as addition of mineral salt and water at will. On the property II were examined 77 sheep; their feeding consisted of grazing on Panicum maximum cv Mombasa and Brachiaria brizantha during the day, and supplementation, once a day with elephant grass (chopped with a machete) and barley, as well as mineral salt and water at will. On both properties there were reports of animals with swelling on the jawbone with pus. On examination, it was observed that on the property I 3.5% (19/544) of animals, ranging in age from two to five years, presented lesions suggestive of periodontitis and on the property II, 3.8% (3 / 78 ), aged between four months and five years. The clinical signs were characterized by poor body score and asymmetry of the mandibular bodies; in the most severe cases, there was fistula present at the site involved, draining the pus secretion, demonstration of pain during chewing and food dropping from the mouth. Autopsies were performed on 15 animals and the lesions were characterized by wasting of the carcass, inflammation and receding gums, accumulation of food in the periodontal region, loosening and / or loss of premolars and molars, both maxillary and mandibular, and in some, presence of dental abscess at the base of the area affected.

Conclusions: The epidemiological data and the early lesions suggest that the fibrous feed predisposes traumas that can facilitate the entry and proliferation of microorganisms characterizing the clinical and pathological criteria of periodontitis.

P: 1069
Venerale shedding pattern of caprine lentivirus in semen of infected bucks.

Cruz Cezar Minardi, J.; Gouveia Maria Guimarães A.; Braz Farias G.; Andrioli A.; Pinheiro Rizaldo R.; Heinemann Bryan M.
Embrapa Caprinos e Ovinos, Brazil

Objectives: The possibility of selection of Caprine arthritis encephalitis virus (CAEV)-free ejaculates from infected bucks enables the preservation of improved genotypes or endangered goat breeds avoiding premature culling. The objective of this study was to describe the CAEV shedding pattern in semen of infected bucks over a 12 months period.

Materials and Methods: Twelve bucks were repeatedly (weekly) sampled for blood and semen over a period of 12 months. Bucks 1 to 5 were inoculated (106 TCID50/ml) intravenously (IV) with CAEV Wild strain and bucks 6 to 10 with CAEV Cork strain. Bucks 11 and 12 were used as controls. Serum was tested for the presence of anti-SRLV antibodies using Agar Gel Immuno-diffusion test (AGID). Blood samples were taken by jugular venipuncture from all bucks. PBMCs were obtained by a ficoll density-gradient centrifugation. DNA was extracted from the leukocytes using a “DNA blood purification kit”. Fresh semen samples were obtained by natural ejaculation. After collection, semen samples were separated into non–spermatic cells fraction (NSC). Viral DNA was obtained from NSC filtered fraction by a procedure using Chelex 100 resin. PCR nested procedure (n-PCR), was performed to detect CAEV proviral-DNA in blood and semen.
Results: Antibodies to CAEV were detected by means of AGID test in sera from 9 of 10 bucks throughout the experiment. Nine bucks (nos. 1-4 and 6-10) tested positive (n-PCR) for presence of CAEV proviral DNA via blood sample analysis after inoculation. Of the 10 bucks tested for CAEV, only one (no. 5) remained PCR negative as well as control males that remained continuously negative in both assays. The NSC fraction was tested for the presence of proviral DNA by n-PCR. PCR amplification using DNA isolated from NSC fraction detected CAEV in semen samples from all bucks tested. The buck no. 5 remained seronegative despite a CAEV PCR positive result in semen. All bucks shed proviral DNA in their semen during throughout sample period.

Conclusions: These results indicate that CAEV is shed intermittently into semen despite of virus strain and delayed seroconversion.

P: 1070
The use of melatonin in reproductive management of dairy sheep and goats in Greece
Bramis, G.; Gelasakis Ioannis A.; Fotiadi E.; Kanoulas V.; Arsenos G.
Department of animal husbandry, Faculty of veterinary medicine, Aristotle University of Thessaloniki, Greece

Objectives: Off-season breeding is a valuable management tool in sheep and goat flocks when the aim is the production of milk and meat in high-demand periods. The notion is that melatonin is directly associated with breeding seasonality and its commercial product, Regulin®, has been available in the Greek market for decades. However, its efficiency has not been assessed in practice. Hence, the objective of this study was to investigate the efficiency of melatonin implementation on off-season reproductive performance of dairy sheep and goats in Greece.

Materials and Methods: Eleven flocks (8 sheep and 3 goat flocks) were selected from different geographical areas in Greece: Peloponnese (4 sheep and 1 goat flock), Thessaly (2 sheep flocks), Central Macedonia (2 sheep and 1 goat flock) and Thrace (1 goat flock). The location of selected flocks represented a longitude and latitude range of 21° to 26° E and 37° to 41° N, respectively. A total of 778 sheep (from 23 to 209 per flock) and 274 goats (from 70 to 100 per flock) were used. Their body condition score was from 2.5 to 3.25. A single subcutaneous implant (18 mg of melatonin, Regulin®, CEVA LLC, Greece) for females and three implants for males were applied according to manufacturer’s instructions. Afterwards, rams and bucks were separated from the ewes and the does, respectively, for 42 days. Breeding period lasted 6 weeks. Diagnosis of pregnancy was performed using ultrasound scanning, 124 days after the application of melatonin. Pearson correlation was used to reveal any correlations between longitude and latitude and pregnancy rate, using SPSS 18®.

Results: The results showed a pregnancy rate ranking from 92.6% to 100.0% and from 82.9% to 94.0% for sheep and goat flocks, respectively. Average conception rate for sheep flocks in Peloponnese, Thessaly and Central Macedonia was 95.9%, 95.2% and 91.5%, respectively. Regarding goat flocks it was 92.3%, 82.9% and 94.0%, respectively. No correlation was found between geographic coordinates and pregnancy rates.

Conclusions: In our study, application of melatonin was found to be associated with considerably high pregnancy rates during off-season breeding both for dairy sheep and goats. The results suggest that off-season induction of estrous is feasible in a high range of regions in Greece. The way forward should be the assessment of other indicators of reproductive performance such as, fertility, parturition interval and prolificacy for dairy sheep and goats.

P: 1071
Serum cortisol levels of newborn goat kids born by normal delivery and cesarean sections
Camargo Gaubeur, D.; Bovino F.; Furtado Viau P.; Yanaka R.; Bregadioli T.; Paulon Viviane C.; Feitosa Formiga F.
FMVA - Faculdade de Medicina Veterinária de Araraçatuba, Univ Estadual Paulista “Julio de Mesquita Filho”, UNESP, Brazil

Objectives: The aim of this study was to evaluate the serum cortisol levels of newborn goat kids from birth to 24 hours of life, born by normal deliveries and caesarean sections.

Materials and Methods: The blood samples were obtained using vacuum tubes without anticoagulant. Then they were centrifuged at 500g, for better separation of serum. This was transferred to appropriate eppendorf, using an automatic pipette and frozen immediately at -20 °C, until the moment of their processing. Serum cortisol levels were analyzed by radio immunoassay test. Data were analyzed using a statistical program. The Friedman test was performed to determine whether there were any significant differences between moments, and mean values were compared by use of a Dunn test, and to compare the mean values between the different groups the t-Student test was performed. A value of P = 0.05 was considered significant for all tests.

Results: The average concentration of cortisol in animals born by normal deliveries at 24 hours old (6.5 ± 4.98 mg/dL) was significantly lower than the gotten concentrations in other moments (17.9 ± 5.27 mg/dL , 16.7 ± 7.51 mg/dL , 15.1 ± 5.15 mg/dL and 15.9 ± 5.32 mg/dL at birth, five, ten and 15 minutes old, respectively). Serum cortisol concentrations of the kids born by cesarean sections were 15.0 ± 5.97 mg/dL, 17.6 ± 9.35 mg/dL, 15.9 ± 4.62 mg/dL, 16.1 ± 5.44 mg/dL and 9.6 ± 4.72 mg/dL at birth, five, ten, 15 minutes and 24 hours old, respectively, where the value obtained at 24 hours old was also significantly lower. When the mean values were compared according to the type of delivery, no difference was observed in any of the moments.

Conclusions: The serum goat kids cortisol levels is influenced by age but is not influenced by the type of delivery.