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1. GLUCOSE/MANNOSE IDENTIFICATION IN COLON OF HORSE FOETUS IN DIFFERENT STAGES OF THE DEVELOPMENT

Castagnino RA, Dauria PG, De la Cruz JP, Sona LA, Mac Loughlin VH, Navarro OE, Martínez RA, Sagripanti GE, Bonino F. *Histología, Dpto. Anatomía Animal, FAV-UNRC. Río Cuarto, Córdoba.*

The Creole horse (*Equus caballus*) like productive unit, cause profitable impact in places dedicated to their exploitation, for what many are the aspects to consider to be able to contribute basic knowledge as the presence of glycoconjugates involved in the digestive process. It is objective to identify the glucose/mannose presence in colon of horse foetus in different stages of the development. Samples of colon of horse foetus belonging to the G1 and G3 periods were used. Were fixed in buffered phormol, included in paraffin for then to be subjected to the lectin histochemistry technique by means of the employment of the PEA and LCA lectins. The detection and later revealed was carried out with the ABC complex and DAB. It was observed in colon of foetus of the G1 period marcation moderated in brush border, weak in enterocytes and negative in goblet cells; while in colon of foetus of the G3 period intense reaction was visualized in brush border, moderated in enterocytes and negative in goblet cells. It conclude that glucose/mannose is present in brush border and enterocytes of the colon with different reactivity grade. More positividad in advanced stages of the development (G3).

2. PLACENTAL OXIDATIVE STRESS IN TISSUE ANGLO NUBIAN GOAT NUTRITIONALLY RESTRICTED

Coniglio MV, Romanini MC, Turiello MP, Merkis C, Cristoffolini A, Pastorino IC, Rolando A. *Facultad de Agronomía y Veterinaria.. UNRC.*

The effect of food restriction in prepubertal period on the expression of nitrotyrosine, a marker oxidative stress in the term placenta of goats. 12 Anglo Nubian goats were distributed into 2 groups: control (fed ad libitum, n = 5), Restricted (55% of the consumed C, n = 7). After 250 days the R group was feedback until delivery. The placental tissue sections were immunostained with a monoclonal antibody anti-nitrotyrosine. We used the LSAB (Kit DAKO) and DAB chromogen. Nitrotyrosine is expressed in the 2 groups with no differences between them. Group R were immuno stained weakly vascular endothelium of the villi. In contrast, in the control group was immunostained endothelium only occasionally. In both groups, nitrotyrosine was expressed in the epithelium of the chorionic villi and strongly the cytoplasm of binucleate cells. The similar expression of nitrotyrosine in both groups indicates that the restriction prepubertal to which mothers were subjected not cause oxidative stress during placentation, which we would indicate an efficient recovery of mothers during pregnancy.

3. MAST CELLS IN CANINE MELANOCYTIC TUMORS: RELATIONSHIP TO ANGIOGENESIS AND PROGNOSIS

Cuitiño MC¹, Guido NM, Massone AR, Idiart JR. *Cátedra de Patología Especial, Facultad de Ciencias Veterinarias, UNLP. La Plata, Argentina. ¹Becaria CIC.*

Mast cells accumulate around and within many types of solid cancer and promote tumor progression through different mechanisms. Express several angiogenic compounds and may play a role in tumor angiogenesis. Only one study has focused on the clinicopathologic relevance of mast cells in canine melanocytic tumors (MT). The aim of this study was to assess the relationship between mast cell density (MCD) and microvessel density (MVD), and to evaluate the prognostic significance of MCD in canine MT. A total of 46 MT (30 cutaneous and 16 oral) with patient's survival data were studied. Sections were stained with toluidine blue and mast cells were counted in 10 randomly selected fields (at 400x magnification; 0.22 mm²), around and within the tumor. MCD was expressed as the number of mast cells per mm². MVD was determined by immunostaining of von Willebrand's factor as proposed by Weidner *et al.* (1995). In cutaneous and oral MT, MCD and MVD were not significantly correlated ($r=0.14$; $p=0.452$ and $r=0.35$; $p=0.179$, respectively). In cutaneous MT, mean MCD was 19 ± 3 (SE) in patients with intermediate-low survival and 35 ± 8 (SE) in patients with long survival, without significant differences between both groups ($p=0.635$). In oral MT, mean MCD was 33 ± 22 (SE) in patients with intermediate-low survival and 13 ± 5 (SE) in patients with long survival. The differences between both groups were not significant ($p=0.912$). According to these results, MCD in canine MT is not related to angiogenesis and it seems to have no prognostic significance in these tumors.

4. TWO TYPES OF HOLOTRICHOUS ISORHIZA NEMATOCYST OF *Hydra vulgaris* PALLAS, 1766 (CNIDARIA, HYDROZOA) FROM TWO DIFFERENT FRESHWATER BODIES

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Hydras are freshwater cnidarians for excellence and the classical example for the polyp form of this phylum. Nevertheless, there exist a great confusion in their taxonomy yet, because many species have morphological variations which difficult their classification. Hydras have scarcely been sampled from the southern hemisphere so it is not known if this species fit into the same four classificatory groups known. The objective of this work was analyzed from their cnidae, the presence of *Hydra vulgaris* in two freshwater bodies from Buenos Aires province, Argentina; "Los Padres" (37° 56' S, 57° 44' O) and "Nahuel Rucá" (37° 40' S, 57° 23' O). The individuals were extracted from periphyton samples, packaged with lagoon water and placed in standard aquariums. Each polyp was observed "in vivo" for species determinations and from this polyp they were realised squashed for the analysis of cnidocysts. For each individual, 30 capsules of each type, registering width, length and disposition of the filament, were measured. We found two types of holotrichous isorhiza, and as this type allows differentiating between species of other groups, we propose modify the nomenclature including holotrichous isorhiza Type I and Type II. This standardisation allows to know if the difference is own of each species or responds to morphological variation from biological cycles or environmental parameters. If this difference turns out to be own from the species, this can become in another trustworthy taxonomic tool.

5. BIHORMONAL GONADOTROPHS IN PITUITARY PARS DISTALIS OF VISCACHA

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In seasonally breeding species showed heterogeneity in the population of pituitary gonadotrophs (LH and FSH). The aim was to study the bihormonal gonadotrophs of pituitary pars distalis (PD) in adult male viscachas during their reproductive cycle. The pituitaries were obtained from viscachas captured during: reproductive (summer), regression (winter) and gonadal recovery (spring) periods and processed for light microscopy. Double immunohistochemical technique was carried out using the sera anti-LH (DAB chromogen) and anti-FSH (chromogen new-fuchsin). Bihormonal cells were counted and expressed as number of cells per microscopic field (N). Bihormonal gonadotrophs were observed throughout the PD, especially in the ventro-medial region. These cells were arranged in groups and isolated, and others interspersed between monohormonal gonadotrophs, covering the blood vessels and near follicular structures. The N increased significantly ($p < 0.05$) from the reproductive period (2.98 ± 0.62) to the gonadal regression period (4.68 ± 0.78), and during gonadal recovery period this parameter (11.70 ± 1.44) increased significantly ($p < 0.001$) in relation to the previous period. The variations of bihormonal gonadotrophs suggest a functional heterogeneity according to the hormonal requirements through the seasonal reproductive cycle.

6. MORPHOLOGICAL CHANGES IN VITRIFIED PORCINE FOLLICLES

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Vitrification of ovarian tissue is an important option to preserve a large quantity of oocytes contained in preantral follicles (PAF). These oocytes are smaller, lack a zona pellucida, meiotic spindle, and cortical granules, characteristics that make them far more tolerant to cryoinjury. The aim of this work was to analyze the effect of ethylene glycol (E) and dimethyl sulphoxide (D) in the preservation of the histological structure of porcine vitrified PAF. Ovaries ($n = 10$) were collected at a slaughterhouse. Seven samples, by duplicated from each ovary were obtained. Control was immediately fixed, while the other groups: TE, TD, TED and VE, VD, VED were exposed to the vitrification solution containing 30%E, 30%D or a combination of both cryoprotectants (15%E+15%D). TE, TD, TED were directly washed and fixed. VE, VD, VED were exposed to LN₂ for 1 week, before fixing them. Primordial PAF were the most resistant to the different treatments (normal PAF: C:71%; TE:53%; TD:15%; TED:26%; VE:40%; VD:18%; VED:25%). The presence of D and ED significantly reduced the percentage of normal primordial PAF when compared with the control and E groups (Friedman Test; $p < 0.05$). Primary PAF were more labile than the primordial PAF in all cases. Although E was the least toxic treatment in these follicles, the ED group responded best to vitrification.

7. PREVALENCE OF MORPHOLOGICAL ABNORMALITIES IN COMMERCIAL FROZEN BULL SEMEN

Ghirardosi MS, Jorge AE, Malcervelli DM, Blasi C, Chan D, Fischman ML, Cisale H.

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Sperm morphology abnormalities and their frequency may help to predict semen fertilizing capacity. The aims of this study were to determine the prevalence of morphological abnormalities in frozen bull semen samples of beef breeds (Angus, Polled Hereford, Tuli and Simmental) and dairy breeds (Holstein and Jersey) and to determine the possible existence of differences between them, regarding the percentage of abnormal sperm. Sperm morphology was evaluated in 55 doses of frozen semen straws using 3% (m/v) Bengal Rose stain and light microscopy (1000X magnification). The mean percentage of abnormal sperm from beef breeds was $15 \pm 9.3\%$ (head defects: $3.5 \pm 3.2\%$, midpiece defects: $9.5 \pm 7.3\%$, tail defects: $2 \pm 1.8\%$) and from dairy breeds was $7 \pm 5\%$ (head defects: $1.5 \pm 2.1\%$, midpiece defects: $4 \pm 2.5\%$, tail defects: $1.5 \pm 2.2\%$). Significant differences in the amounts of abnormal sperm, head defects and midpiece defects ($p < 0.05$) were found, while there were no significant differences in tail abnormalities between both biotypes (Median Test). These differences could be due to different selection pressures exerted between biotypes.

8. IMMUNOLocalIZATION OF P-GLYCOPROTEIN IN HELMINTHS OF VETERINARY INTEREST

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Liver fluke (*Fasciola hepatica*), *Paramphistomum spp.*, *Ascaris spp.* and *Moniezia spp.* are endoparasites of herbivores polygastric. These worms have molecular and biochemical mechanism of detoxification for protection against various xenobiotics includes the anthelmintics. Within the detoxification mechanisms include the use of extrusion pumps such as P-glycoprotein (P-gp), a membrane transporter protein, which acts secreting a variety of endogenous substances and xenobiotics from inside the cell to the extracellular space via an ATP-dependent mechanism. The mammalian P-gp is located in cells involved in the absorption, distribution and excretion of drugs such as certain cells of the liver, intestine, blood brain barrier, among others. This location suggests that P-gp plays an important role regulating the transport of drugs across cell membranes, altering the kinetic behavior and the bioavailability of drugs. The aim of this study was to identify by immunohistochemistry the presence and distribution of P-gp in histological sections of the parasites mentioned above. Techniques were performed for routine histological cuts of parasites and proceeded to perform immunolocalization with P glycoprotein (monoclonal antibody Sigma) and immunohistochemistry using LSAB (DAKO Lab). The results showed immunolocalization of P-gp in vitellogenic cells and spicules of *Fasciola hepatica*, in cuticle of *Ascaris* and *Moniezia spp.*, not immunolocalized in sections of *Paramphistomum spp.*

9. SINUS ORTOPANTOMÓGRAFO SECTOR DISTORTION

Irigoyen S, Abilleira E, Segatto R, Bustamante C, Mancuso P, Fingermann G, Delocca M, Mazzeo D. FOUNLP. La Plata. Buenos Aires.

The planning and carrying out the diagnostic procedure of inserting the implant surgery, require a comprehensive study of the skeletal anatomy of the jaws, their air cavities and their neurovascular conduits. The aim of this work is to standardize the technique for obtaining panoramic radiographs, to acquire the degree of distortion of the same sector sinus compared to bone dry. To carry out the work were used 50 skulls obtained from Osteoteca Faculty of Dentistry, UNLP. They were numbered with Arabic numerals. Panoramic radiographs were obtained in the Radiology Course Faculty of Dentistry; UNLP. Measurements were used for elements of optical magnification and Vernier gauge type graph. Measurements were made taking into account the distance between the flange and the cortical bone of the maxillary sinus floor. Data were recorded on the cards for each experimental unit. Later measurements were taken in the dry bone was recorded on the appropriate tabs. Also tutors were measured on radiographs known measures and proceeded to calculate the degree of distortion for each region. Values range for the upper jaw of a 10% magnification in the posterior, both vertically and horizontally. It would be advisable to use a reference or guardian of measurement known to arithmetically calculate the distortion and thus to measure with values close to reality.

10. APOPTOTIC PROCESSES IN BURSA RELATED TO VACCINATION AGAINST INFECTIOUS BURSAL DISEASE

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Infectious bursal disease is a viral disease of young birds that causes apoptosis in the B lymphoid series, leading to immunosuppression. The application of live virus vaccines has been helpful but its apoptotic effects in Fabricius bursa are unknown. This research studied the apoptotic effects of such vaccines on this organ. We worked on 220 one-day broilers, divided into four experimental groups. Two groups were vaccinated with live vaccine strain intermediate soft Lukert and intermediate strain ST-14 respectively. A third group was inoculated with the adjuvant vaccines. The fourth control group received no treatment. Animals were sacrificed in groups to 3-7-14-21-28 days post inoculation. Bursas of Fabricius were analyzed by staining with hematoxylin and eosin, and TUNEL technique for the quantification of apoptotic cells and degree of bursal damage. Data was analyzed by analysis of variance for $p < 0.05$. Vaccinated animals were found to have increased their apoptotic cells in each sample period compared to those of the control animals, and the pathological analysis showed obvious damage. The live vaccine virus, such as the strains used in the formulation of these vaccines, trigger mechanisms in the bursa like the pathogenic virus, leading to the death of B lymphocytes by apoptotic phenomena.

11. VASCULARIZATION AND MORPHOMETRY OF THE ULNAR AND MEDIAN NERVES IN THE BRACHIAL REGION DOG

Llano EG, Flores Quintana CI, Baez AD, Cabrera WR, Benítez Ruiz Díaz JS, Meyer MV. Cátedras de Anatomía II e Histología y Embriología. Facultad de Ciencias Veterinarias, U.N.N.E. Corrientes.

The ulnar and median nerves in the brachial region form a single trunk from the shoulder joint to the middle third and distal arm where separate, continuing through the region of the fingers. The blood supply of peripheral nerves as a vascular plexus is composed of arterial systems, extrinsic and intrinsic anastomosed. In cross section the nerve is seen encircling the nerve fiber, the endoneurium. The fibers are grouped in varying amounts of bundles, wrapped perineurium. These pamphlets and the intraneural vessels are surrounded by epineurium. The objective was to determine the origin and segmental distribution of blood vessels in the vascular system and extrinsic morphometric parameters (area of the fascicles, nerve fiber diameters and thickness of the surrounding connective tissue). Twenty members were used earlier as a methodology to apply: 1) Axillary artery cannulation and injection of colored neoprene latex 2) fixation of the material in 10% formalin, 3) dissection and photographic documentation, 4) nervous trunk section proximal and distal segments, 5) application of the histological technique for paraffin blocks, 6) optical microscope observation cited by determining morphometric parameters, the image analyzer using Image Pro-Plus Software, Version 4.5, Media Cybernetics Inc. Both segments are irrigated by small branches of the brachial artery. The average numbers observed in the proximal segment were 3 issues, an area of 0.96 mm² and the distance between the perineurium and epineurium of 0.7 mm. The average numbers observed in the distal segment were: 4 bundles, area of 0.65 mm² and the distance between the perineurium and epineurium of 0.73 mm. Alerts issued on vascularity and morphology of the ulnar and median nerves in the brachial region, contribute to a better understanding of the anatomy, providing a useful contribution to trauma surgery, especially in nerve repair.

12. PRISMATIC AND NON-PRISMATIC ENAMEL. ENVIRONMENTAL SCANNING ELECTRON MICROSCOPY

Llompert J, Durso G, Tanevitch A, Batista S, Llompert G, Abal A, Martínez C, Licata L. Facultad de Odontología. UNLP. La Plata. Buenos Aires.

Prismatic enamel (radial, irregular and Hunter Schreger Bands – HSB – types) constitutes the highest enamel volume in permanent and deciduous teeth. Non-prismatic enamel is found on the outer surface of deciduous, and occasionally permanent, teeth; it is more resistant to the acid etching required in the use of dentistry materials than prismatic enamel. The purpose of this work was to identify prismatic and non-prismatic enamel types in deciduous teeth using environmental scanning electron microscopy (ESEM) and to analyse the chemical elements present in them. Six exfoliated upper canine teeth were embedded in epoxy resin, grinded, etched with acid and observed under an ESEM FEI Quanta200 microscope. An elemental analysis using an EDS (energy dispersive spectrometer) detector was also done. In the incisal area of the free faces, HSB enamel type was identified in the two inner thirds and radial type in the outer third. The middle third exhibited HSB enamel, which occupied a thicker portion in the palatine compared to the vestibular zone, as well as outer radial enamel. In the cervical zone, there was evidence of radial inner enamel and non-prismatic outer enamel with parallel crystals perpendicular to the external border. No irregular enamel occurred. Microanalysis in prismatic enamel showed Wt%: Cl 0,35; Ca 34,18; P 16,95; C 15,31; and in non-prismatic enamel Cl 0,77; Ca 28,96; P 14,53; C 24,07. Thus, we conclude that radial and HSB prismatic enamel and non-prismatic enamel were identified; and that the percentage of chlorine ions found in the non-prismatic enamel could explain the lower solubility in acids.

13. RELATION BETWEEN *Helicobacter spp* AND PRODUCING CELLS OF GASTRINE. PRELIMINARY STUDY

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The *Helicobacter spp*, is a microorganism negative Gram that lodges in the mucous one gastric and the main cause of peptic ulcer is considered. Carried out studies confirm the implicate of the *Helicobacter spp* in the man's gastric pathologies. The *Helicobacter* alters the physiologic regulation of the sour secretion and it predisposes to the ulceration. The secretion of the gastric acid is controlled by the hormone gastrina, synthesized by the cells G of the mucous astral. Presently work was studied the relationship of the presence of *Helicobacter spp* with regard to the functionality of the cells gastrina producers in human gastric biopsies. For it was determined it the presence of *Helicobacter spp* in gastric biopsies of patient women among 30 - 50 years with I diagnose of gastritis H (+) and H (-) obtained by technical carried out endoscopic of routine in the Service of Digestive Endoscopia of the New Hospital River IV, taken mainly of the region antral. The detection of cells G was carried out for technical inmunohistoquímicas with commercial antibodies. The percentage of cells positive gastrina was determined in women's samples with gastritis that you/they had or non *Helicobacter* H (+)/H (-). Differences were detected statistically significant between both groups with a $p=0,03$. In this preliminary study the results indicate us that the increase of non alone gastrina refers to its concentration, like other authors settle down, but also to the increase in the number of cells that you/they produce it.

14. DESCRIPTION OF THE SEMINIFEROUS EPITHELIUM OF THE ARMADILLO *Chaetophractus villosus* (XENARTHRA, MAMMALIA). CELLULAR ASSOCIATIONS

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Armadillos of the order Xenarthra are distinctive among other mammals for many features of their reproductive biology. Basic knowledge on the features of spermatogenesis in armadillos will be useful for the regulation of their populations in the wild. Testes (one side only in each animal) from 26 adult *C. villosus* were excised under anesthesia, after being captured in Loma Verde, Province of Buenos Aires, at different times during a whole year. The tissues were fixed in Bouin, embedded in paraffin and sections 3-5 μm thick were stained with routine haematoxylin after being processed with the PAS reaction. Other pieces were fixed in 2,5% glutaraldehyde, embedded in epoxy resin and semi-thin (0,5 μm thick) were cut and stained with toluidine blue for light microscopy. Thin sections (0,07 μm thick) were used for electron microscopy in a Zeiss EM9. The cellular associations (eight) of the cycle of the seminiferous epithelium are described, and the cytological and ultrastructural features of the tubular cells are described both in the active and the inactive phases of gametogenesis. The basement membrane of the tubules forms protuberances that indent the cytoplasm of Sertoli cells. Sertoli cells show some nuclear distinctive features, and in the inactive phase show a very large number of lipidic inclusions. Two spermatogonial types are described. Spermiogenesis shows some particular features: the development of the "manchette" is outstanding, and the process of head morphogenesis in spermatids leads to extremely long and thin heads. These features allow a differentiation of this spermatogenesis process from that of other mammals.

15. LIGHT AND ELECTRON MICROSCOPY, A TOOL TO THE PROFESSIONAL PROFILE OF THE LABORATORY TECHNICIAN

Merkis C, Mac Loughlin V, Cristofolini A, Grosso C, Sanchis G, Dauria P, Chanique A, Sagripanti G.
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During the course of the subject Anatomy and Histology the topic Conventional Histological Techniques has been only related to a theoretical activity as introduction. Given the importance of lab practice in this topic to the professional profile of Laboratory Technician, the need to make some innovations in the use and applications of the Light and Electron Microscopy has emerged. From an analysis made by the teaching staff arised the need of the knowledge of these concepts in several conventional lab techniques. For that purpose, the job was jointly undertaken with the teachers of Parasitological Techniques of the same degree course. The instruments and methodologies are the basement that future Laboratory Technicians will use along the six-year university course and in their careers. The incorporation of two theoretical-practical activities referred to the above mentioned topics during the course of Anatomy and Histology has the aim to achieve better handling of lab materials, the preparation of solutions, the use of optical and precision instruments and the interpretation of results in relation to the theoretical context. The objective of the present work is to develop alternative strategies to improve the professional profile of the Laboratory Technicians, through different interdisciplinary teaching guidelines. From this innovation, we hope to stimulate a reflexive thought between the theoretical content and the professional practice, and to encourage the students of Laboratory Technical Degree in the development of skills based on an interdisciplinary approach.

16. CANINE CORONARY ARTERY

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Vascularization is a predominantly left heart in dogs. In the equine coronary anastomosis is located in the coronary groove is given by the circumflex artery. In ruminants are located in the heart area right between the terminal branches of the right coronary artery and interventricular artery branches subsinusal. In pigs and dogs are not described anastomoses. The aim of this work is to verify the absence of anastomosis in the canine heart. In 25 corpses were channeled aorta and injected colored latex achieving repletion of both coronary arteries. This material was immersed in 10% formalin for 5 days, then dissected the coronary arteries, after drying at room temperature with subsequent coating the coloring of the body material. In 6 hearts were injected with barium sulfate to 55% and radiographs were obtained. The left coronary artery originating from the aortic bulb left breast is bigger than the right passes between the left atrium and the pulmonary trunk, branches in paraconal interventricular descending branch irrigating the left wall of the heart and much of the interventricular septum The other branch is called continuous circumflex interventricular sulcus subsinusal right to the apex of the heart. The right coronary artery originates from the aortic sinus bulb head passes between the right atrium and the pulmonary trunk, runs along the coronary groove and ends near the interventricular groove right. There were no anatomical material injected into the latex or the X-rays of both coronary artery anastomosis, however it has been found in the dog than in the case of gradual occlusion of a coronary artery neovascularization develops rapidly or anastomosis prevents heart attack.

17. REVIEW OF THE EYEBALL INNERVATION SURGICAL PURPOSES IN CATTLE

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Knowledge of relevant nerves to the eyeball, from the gross anatomy and relationships with neighboring structures are key, among other things, the regional anesthetic block techniques. The oculomotor nerve originates in the pit intercrural, leaves the cranial cavity through the upper orbitotundum foramen and divides into dorsal and ventral branch. Innervates the dorsal rectus muscle dorsal and upper lid. The ventral branch is the continuation of the original trunk, supplies the ventral rectus, medial rectus and the ventral oblique. The trochlear nerve is a small filament that emerges from the rostral medullary velum. Leaves the cavity in the upper orbitotundum foramen, innervates the dorsal oblique muscle, dorsal rectum and upper eyelid lift. The abducens nerve emerges from the ventral surface of the medulla oblongata, leaves the cranial cavity in the middle of orbitotundum foramen, and supplies the lateral rectus and retractor muscles of the bulb. The objective is to achieve a precise knowledge about the anatomical arrangement of nerves of the eyeball. This allows us to understand the importance anatomourgic in order to perform nerve blocks for surgical purposes. In 6 head of cattle used the following methodology: 1) removal of the skin, 2) immersion in 20% formalin for 72 hours, 3) classic dissection of the nerve trunk, displaying the origin of the different branches that innervate the region concerned, 4) photographic documentation of the dissections. In the 6 stuffed heads, achieved a good identification of the corresponding nerve and its branches. This would allow a proper application of anesthetic drugs in the area for surgical purposes.

18. THE INFECTION HPV (HUMAN PAPILLOMAVIRUS) MOUTH AND INJURY IN INFANTS

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Scientific evidence indicates the relationship between Human Papilloma Virus (HPV) and different oral lesions. It is widely studied in adults and rarely in infants. Sexual transmission is the usual route of contact. There are other possibilities, including mention of the transmission. The aim was to detect HPV in a molecular biology technique of high specificity and related to child transmission. Were considered: a) a baby for five days with congenital epulis of the newborn; b) an infant of forty-five days Bohn nodules and c) a six month old baby with flat warts in cheek. Samples were taken in Eppendorf tubes microbrush placing them in saline. Technique was applied chain reaction (PCR) for detection and LIS-SSCP variant for typing. We used two pairs of primers: My09/11 and Gp05/06. Reading electrophoretic run was performed by polyacrylamide gel 6%. The same technique was used for maternal DNA. The baby) was positive for HPV16 type and negative mother. The infant b) positive for HPV6, like the mother and finally c) negative baby and mother. In draft form and given a small but significant n for the cases considered, we infer that: 1 - The condition can be temporary, as it detected in normal oral mucosa, 2 - The infant is free of infection by HPVs. (Low or high risk) 3 - The low-risk infection usually returns while the persistent high risk can lead to a change or transformation epithelial, 4 - vertical transmission is important because the percentage of women infected with HPV is high.

19. IDENTIFICATION OF SIALIC ACID IN DUODENUM OF ÑANDU

Navarro OE, Sona LA, Castagnino RA, De la Cruz JP, Dauria PG, Tissera JL, Corteggiano F, Mac Loughlin VH, Martínez RA, Sagripanti GE, Ledesma CR.

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The ñandu (*Rhea americana*) it is an exclusive species of South America and it is included in the call industry of. Ratites. The same one is reaching great advance in different countries, being carried out several studies regarding diet, feeding but little it is known on the list that they complete the glycoconjugates in the digestive process. It is objective of the present work to identify the presence of sialic acid in ñandu duodenum. Samples of the duodenum of ñandu captured in Río Cuarto hatchery were fixed in buffered phormol, included in paraffin and then subjected to the lectin histochemistry technique being used the *Maackia amurensis* II lectin. For the detection and later revealed it was used the ABC complex and DAB. Intense marcation was obtained in brush borders and intense reaction had moderated in epithelium of the intestinal villi, great positividad in having knitted connective located among the two bands of the muscular tunic and in having knitted connective of the serous tunic. It can be concluded that the sialic acid is present in structure-tissue different of the duodenum of ñandu, which showed reactivity grade different.

20. HISTOLOGIC CHARACTERIZATION OF TESTICULAR DEVELOPMENT IN *Columba livia* (AVES: COLUMBIFORMES)

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In the birds, the gonads are organized and differentiate to dividing a couple of genital combs, which are constituted by Cells Germinate Primordial (CGPs), of origin extra-gonadal. In this stage they are "indifferent" and it is not possible to differentiate the sexes. Later in the masculine gonad the túbulos seminíferos are organized differentiating the sexual cells from the CGPs. Studies of the development gonadal in birds have been studied in species model as *Gallus gallus domesticus*. Some authors propose that in this taxon doesn't exist a state of "indifferent" since the sites of colonization of the CGPs differ between males and females. From these two models, the study of the development gonadal in different species of birds will help to elucidate variations in the patterns of development gonadal in vertebrates. In this work we describe the histogénesis in *Columba livia*'s testicles. We analyzed the histological constitution of testicles of embryos from the stage (E.) 21 to 44. And neonatos of 4, 13 and 25 days post-hatching (dpe). We realized prepared histological following the tecnic of coloration with hematoxilina-eosina, tricrómica of Masson and PAS. The histological analysis showed that from E. 21 to 24 the gonad is formed by a loose tissue of cells of support and CGPs distributed uniformly. In E. 27 organize the medullary cords which form the túbulos seminíferos since E.37. At the end of the development the testicle presents túbulos seminíferos clump, formed for espermatogonias and Sertoli's cells, surrounded by Leydig's cells. In the neonatos between 13 and 25 dpe the above mentioned constitution is kept and inside the túbulos seminíferos a light is demonstrated. These results allow inferring an initial condition of "undifferentiation" in the development gonadal and contributing information for comparative studies with other species of birds.

21. ANDROGEN RECEPTOR AND 11 β -HSD ENZYME IMMUNOEXPRESSION IN SHEEP FETAL TESTIS AFTER *IN UTERO* BETAMETHASONE ADMINISTRATION

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Androgens through their receptors (AR) mediate physiological responses essential for the development of spermatogenesis. The enzyme 11 beta-hydroxysteroid dehydrogenase type 1 (11 β -HSD) is expressed in the testis and regulates glucocorticoid metabolism. The present study determined the AR and 11 β -HSD immunoeexpression in fetal sheep testis treated *in utero* with betamethasone. Pregnant Australian Merino sheep (n = 12) were randomly divided into a treatment group (betamethasone injected intramuscularly, dose: 0.5 mg / kg at 104, 111 days of gestation) and control group (injected with saline; 5ml). The male fetuses testes were extracted at 118 days of gestation fixed in Bouin and processed for immunohistochemistry. AR and 11 β -HSD were immunolocalized and the percentage of immunoeexpression was measured for each protein by image analysis. The results were expressed as mean \pm SEM, compared by ANOVA (p <0.05) treated and control animals. AR immunoeexpression was similar in treated animals versus controls (23 \pm 0.3 vs. 22.6 \pm 0.3%, p = 0.3). The 11 β -HSD immunoeexpression decreased in animals treated with betamethasone compared to controls (18 vs 20 \pm 0.28 \pm 0.24%, P = 0.000). The action of 11 β -HSD is known to be predominantly protective against the deleterious effects of glucocorticoid. The reduction in enzyme immunoeexpression suggests a probably saturation of the 11 β -HSD that could not be adequate to inactivate exogenous steroids administration.

22. BIOMECHANICAL AND MORPHOFUNCTIONAL ANALYSIS OF THE APPENDICULAR SKELETON OF *Macrauchenia patachonica* OWEN 1840 (MAMMALIA, LITOPTERNA): PRELIMINARY RESULTS

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Macrauchenia patachonica is a South American extinct ungulate, and the last representative of the order Litopterna. Due to its morphological features it is included in the Quaternary megaherbivore. The goal of this work is to infer the locomotor features of *M. patachonica* using its limb morphometric features. For the morphological analysis, 16 long bones were measured with a digital caliber (0,01 mm); these results were used to calculate 13 indices: shoulder moment index (SMI), humerus transverse robustness and anteroposterior robustness indices (HRI, APhi), epicondyle index (IE), radius-ulna transverse robustness and anteroposterior robustness indices (RURI, APRUI), olecranon index (OI), brachial index (BI), femur robustness index (FRI), lesser trochanter index (LTI), tibia robustness index (TRI), tibia spine index (TSI), and crural index (CI). The indices were compared by difference of means between *M. patachonica* and living ungulates. The SMI, OI, APRUI and LTI values were similar to those of living ungulates, indicating that cursorial adaptations, like limb stability and speed changes adaptations were present in *M. patachonica*. The other indexes are major or less (IC) than the average of ungulates; IE, RURI and BI indices indicate a forelimb larger robustness and a forelimb largest transverse development than in living ungulates, although with a cursorial adaptation. IRF, ITR and IC indices indicate a hind limb adaptation to corporal mass support, with major values than in ungulates. As a preliminary result, *M. patachonica* would be a graviportal animal with cursorial features.

23. LAMB'S TESTICULAR DEVELOPMENT IN ABSORBENT CROSS WITH SANTA INES SHEEP

Flores Quintana C, Brunel A, Bode F, Yáñez E, Furlong G. Histology and Embryology. Fac. de Cs Veterinarias. Corrientes.

The sheep have a proven importance in livestock production in our country and show different productive advantages than cattle does and its appreciation allows to maximize production. Many of these benefits are linked to reproductive function. Santa Ines breed is a good alternative to meat production in northeastern Argentina. Even though the existence of flocks of sheep without wool is registered in Corrientes 'province. Very little is known about male's reproductive characteristics, important aspects such as, testicular growth in lambs product of their crosses, the age of puberty and the development rate of testicular function and reproductive capacity are undefined. For this reason, there are no basis for making decisions regarding the selection, evaluation and use of young sementals, considering the influence of the region's food and climate on growth characteristics. Half-breed Santa Ines lambs and pure breed Romney Marsh lambs were evaluated. Every 30 days from birth, the following measurements were made: scrotal circumference, live weight, thoracic perimeter and body length in 15 lambs from each group. The samples were extended from the 1st to the 6th month. Tissue samples were taken and they followed routine histological process, In Images Analises Lab of Cátedra de Histología de la Facultad de Ciencias Veterinarias de la UNNE by means of Image Pro Plus Software (Version 4,5 Media Cybernetics Inc. The slides were photographed and tube dimensions, the beginning of the tubular lamination and cellular changes within and outside the tubules, were determined. The testicles of the half-breed lambs showed from second month the beginning of tubular lamination, spermatid epithelial stratification and the presence of Leydig cells whereas in pure lambs these changes were observed after the third month.

24. TUNING FOR THE DETERMINATION OF RANKL AND OPG IN TEETH OF CAT BY IMMUNOCYTOCHEMISTRY

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Several studies have shown that severe periodontal disease (PD) results in dental resorption in human and animal teeth. Although how these resorptions occur are not entirely clear, various signals exist at the molecular level that would trigger the responsible cells for dental destruction (osteoclasts / odontoclasts). Nuclear Receptor Activator Complex K (RANK), its ligand (RANKL) and osteoprotegerin (OPG) regulate the activation of cells that induce the formation or resorption of dental tissue, according to the stimulation they receive. No previous studies indicated that available antibodies could be used in teeth of cat, for that the aim of this paper is to report the development of the technique of immunocytochemistry (ICQ) for determination of RANKL and OPG in normal teeth and teeth with periodontal disease of cat. Two normal teeth and 5 with severe EP from 3 cats were analyzed. Teeth were fixed in buffered formaldehyde for at least 48 hours, decalcified with 10% formic acid and processed with routine technique (H/E). For ICQ rabbit anti goat secondary antibody (Biotin), rabbit anti goat, primary OPG (N-20) and RANKL (N-19) primary polyclonal antibodies (Santa Cruz Biotechnology®, Inc) (1/100), Dako Streptavidin were used and revealed with DAB. Bone marrow (for RANKL) and rat small gut (for OPG) were used as positive control. Reaction was positive in the area of the periodontium. This study shows that these primary antibodies could be used in cat dental tissues with positive results.

25. EFFECT OF DIET ON THE HEPATOPANCREAS STRUCTURE IN THE RED CLAW CRAYFISH *Cherax quadricarinatus*

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The hepatopancreas (HP) of decapods is the main organ involved in the synthesis and secretion of digestive enzymes, absorption and storage of lipids and glycogen. The functional unit is a blind tubule of simple columnar epithelium that consists of four major cell types: E, F, R and B. The objective is to evaluate the effect of three diets with different lipids: proteins balance on the HP structure of *C. quadricarinatus* juveniles. The compositions were: 6.50%, 4.40% and 16.03% of lipids and 47.50%, 37.45% y 3.85% of proteins for Diets 1 (D1), 2 (D2) y 3 (D3) respectively. Juveniles of an average weight of 1, 7 and 14 g were daily fed for 24 days (5 animals per weight and diet). The HP were dissected, fixed and processed for light microscopy. The animals fed with D1 showed no structural alterations while with D2 the reduction in the number of F cells, hypertrophy of B cells, some areas with lower height of the epithelium and little differentiation between cells B and R were observed. With D3 the same types of alterations were observed but all of them were more pronounced; in addition the lost of the tubular structure was also detected. We conclude that the composition of D1, at least in terms of protein: lipid balance is more appropriate for feeding juvenile of *C. quadricarinatus* of the assayed weight. *Financial support: PICT 2007 (01187), PIP 2009 (129), X458 (UBACYT).*

26. HEPATOPANCREAS STRUCTURE IN THE FRESHWATER RED CLAW CRAYFISH *Cherax quadricarinatus* (DECAPODA, PARASTACIDAE)

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The hepatopancreas (HP) is the organ involved in the digestion, absorption and storage of nutrients in decapods. It is a compact structure constituted by many blind tubules of simple columnar epithelium that consists of four major cell types: E, F, R and B. Although the architecture of the HP is known in marine and freshwater shrimps there is no knowledge about it in crayfishes. In the present study the structural changes related to crayfish size were analyzed comparing the HP histology of early juveniles (stage III that represents the stage when exogenous feeding starts; nearly weight 16-18mg) and juveniles of 1, 7, 14 g (mean weight). All of them were fed with a high protein percentage diet. The results indicated that early juveniles stage III has little differentiation of the cell types B and R cells and shorter tubules than the other juveniles. The main difference between 1, 7 and 14 g juveniles is related to the number and length of HP tubules (more tubules and longer in greater juveniles). There were not observed neither difference in the cellular types nor cells size.

Financial support: X458 (UBACYT), PICT 2007 (01187), PIP 2009 (129).

27. GROWTH OF THE PAPILLAS RUMINALES IN ANIMALS WEANED HIPERPRECOZMENTE

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In the female bovine lactation acts as a constraint on ovarian activity, resulting in low procreate. Now appears on stage, "allowing weaning hiperprecoz highlight the role of the cow and calf production, relegating its role in these feeder calves. Studies establish that the postnatal development of the stomach of ruminants related to the size, age and diet. The aim of this study was to measure the development of ruminal papillae in hiperprecozmente weanlings fed a commercial feed. This morphometric studies were performed on histological sections of the dorsal sac of rumen. Were selected 24 cows with their calves, divided into 2 equal numbers treatments: T1, calves at foot to 180 days old and T2, calves weaned at 30 age. The experimental period was between 60 and 90 days age. The samples were fixed in buffered formalin and processed by conventional histological techniques for morphometric then examine. The parameters evaluated were: height and width of the papillae, epithelial height and width of the parakeratin. It was found that the use of commercial feed produced an accelerated maturation of the ruminal papillae at 60 days of age, shortening the pre-ruminant. Using the technique of weaning hiperprecoz and quality of food used accelerate the growth of rumen papillae providing the greatest benefit when there are supply constraints on forage.

28. HIGH SCORE OF DESMIN AND VIMENTIN OF PORCINE PLACENTA. PRELIMINARY STUDY

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The presence of different intermediate filaments, including desmin and vimentin, plays a fundamental role in the implantation and placental development of different animal species. Desmin and vimentin have been related to tissues reorganization and development during placental establishment. The objective was to study the distribution of immunolabelling intensity of desmin and vimentin in porcine placentas of 30, 60 and 114 days of pregnancy. Histological sections of $\pm 4 \mu\text{m}$ and primary antibodies Santa Cruz, Inc. conjugated with FITC were used. For each tissue, a HSCORE value was derived by calculating the sum of the percentages of cells that stained at each intensity category and multiplying that value by the weighted intensity of the staining. No significant differences were detected for any filaments along pregnancy; however, there was a clear decrease in mean values of desmin (30d: 280; 60d: 232 114d: 222) and vimentin (30d: 232; 60d: 212; 114d: 198) with advancing gestation. The presence of desmin and vimentin in the placental/fetal microenvironment during the first third of pregnancy would facilitate tissue maintenance and integrity during porcine placental development. In at term placentas, the decrease of these molecules would be related to the mechanisms involved in furrowing.

29. SPERM MORPHOLOGY, SEMINAL PARAMETERS AND TESTOSTERONE SERUM CONCENTRATION OF FALLOW DEER *Dama dama* IN CAPTIVITY

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The present study is included in a conservation project for Neotropical endangered Cervids. Reproductive seasonality is a common strategy in deer in order to synchronize parturitions. It's important to consider those changes in male reproductive physiology in order to improve the optimal moment to obtain and storage deer sperm in genetic resources banks. The fallow deer *Dama dama* was used as a biological model. The aim of this section of the project was to study the concentration of testosterone, the seasonally deer semen quality during the post-brama and brama, and sperm morphology prior to cryopreservation of semen. The seminal material was obtained by electroejaculation, free testosterone was determined by the method of calculation from RIA and SHBG and total testosterone was obtained by the chemiluminescence method (682.75 ± 380.80 pmol/l; 3.59 ± 3.15 ng/ml in brama period and 104.60 ± 106.63 pml/l; 0.37 ± 0.50 ng/ml in post-brama period, respectively). The mean total sperm number per ejaculate were $527.49 \pm 538.06 \times 10^6$ esp and $10.86 \pm 17.52 \times 10^6$ esp, brama and post-brama respectively, with a sperm motility percentage of $81.66 \pm 16.81\%$ and $45.00 \pm 42.23\%$ respectively. The average size of the sperm head of fallow deer was long 12.10 ± 0.31 μ m and wide was 6.87 ± 0.12 μ m. This study contributes to understand seasonally sperm quality and hormone variation, allowing to advance with the development of reproductive biotechnologies as a conservation strategy for threatened species of the Cervidae family.

30. INTERSTITIAL CELLS OF PINEAL VISCACHA: IMMUNOMORPHOMETRIC STUDY

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Interstitial cells (IC) of pineal gland have been studied on different mammals, which are considered sustentacular cells. In our laboratory we study the neuroendocrine mechanisms involved in adaptation and reproduction of viscacha (*Lagostomus maximus maximus*). It is a rodent of nocturnal habits and photoperiod-depend seasonal reproduction. The purpose of this work was to analyze the IC of pineal male adult viscacha during summer (long photoperiod) and winter (short photoperiod). The immunohistochemical technique for the proteins S-100 and GFAP (Glial Fibrillary Acidic Protein) was employed and the percentage of immunopositive area (IA) was determined by image analysis. IC have irregular shape with long cytoplasmic processes distributed throughout the parenchyma. They reach the pinealocytes and some blood vessels. The IC showed immunostaining mainly with anti-S-100 and anti-GFAP. Immunostaining for S-100 and GFAP were more intense in short photoperiod (IA values: 25.32 ± 1.32 and 15.80 ± 1.53 ; respectively). During long photoperiod the IA values were 10.49 ± 2.48 and 5.21 ± 0.99 , respectively. Our results demonstrate a significant increase of the expression of S-100 protein and GFAP during short photoperiod, suggesting a higher activity of IC in winter, according to the pineal gland activity. Future assays will be necessary to elucidate if IC are involved in the glandular regulation.

31. COMPARISON OF TWO METHODS TO EVALUATE MORPHOLOGY IN PORCINE CUMULUS - OOCYTE COMPLEXES

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INITRA, HISTOLOGIA, FCV, UBA. CABA.

Cumulus – oocyte complexes (COCs) morphology is evaluated not only for basic research but also to select the most suitable to use in biotechnological methods in reproduction (*in vitro* maturation, *in vitro* fecundation, embryo production). Traditionally, COCs morphological evaluation involves stereomicroscope observation and routine stains by placing them on slides, obtaining an imprecise image caused by the overlap of cumulus cells on the oocyte. The aim of in this study is to compare porcine COCs morphology using different stains, not only with the traditional method but also with a new technique: thin sections embedded in historesin. COCs are aspirated from 3-8 mm antral follicles from ovaries of slaughtered gilts. They are classified under stereomicroscope, fixed in paraformaldehyde 2%, dehydrated with acetone and embedding in hydroxyl ethyl methacrylate. The 1-2 μ m sections are obtained with a rotary microtome and stained with H-E, Orcein. This technique allows the evaluation of different sections in the same COC, with no distortion of cell morphology by overlap, and the same COC can be evaluated simultaneously by different stains. The different morphological groups established by fresh observation could be characterized by this method. This novel technique may contribute to morphological knowledge of these structures in various species.

32. LEVELS OF ESTROGENS AND PROGESTERONE IN SALIVA OF ADOLESCENTS AND ITS RELATIONSHIP WITH GINGIVAL MORPHOLOGY

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With the onset of adolescence, begin the sex life in women and physical changes occur. Gingival level notes increase in permeability edema and vasodilatation capillary action of Progesterone and decrease of the layer of keratin by estrogens. This determined clinical Observable changes in gingival morphology. The level of sex hormones in saliva is correlated with their level in blood. The objective of the work was identifying morphologic changes in marginal gingiva and its relationship to levels of estriol and progesterone in saliva if pregnant adolescents. The simple used was 60 adolescents aged 14 to 19, 30 pregnant in the first quarter and 30 no pregnant. They were asked a mouthwash to drag remains that could contaminate the simple. Collected saliva in polystyrene tubes and biocidal product added prevent bacterial contaminations. Method of radioimmunoassay using an enzyme as a markes was used. The study found 8 to 17 pg/ml of estriol and 15 to 48 ng/ml of progesterone in adolescents pregnant and 5 to 10 pg/ml of estriol and 10 to 34 ng/ml of progesterone in no pregnant. These values allow to conclude that you for the study sample values of estriol and progesterone indicate a morphological change matching its increase in saliva.

33. MORPHOMETRIC STUDIES IN PRETERM FETAL TESTIS AFTER PRENATAL BETAMETHASONE ADMINISTRATION

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Antenatal glucocorticoids are used as a therapy in pregnant women at risk of preterm delivery, to improve lung maturation. However, betamethasone treatment produces low birth weight and increase in predisposition to metabolic diseases in later life. The aim of this study was to evaluate whether *in utero* betamethasone administration affect preterm fetal testicular morphology. Pregnant Merino ewes were divided in two groups: betamethasone treated (0.5 mg/kg, at 104, 111, 118 days of gestation), and control group (saline). Testes from 132 days of gestation fetus were processed for histology and stained with hematoxylin-eosin. Morphometric variables were analyzed including sex cord diameter, volume densities of sex cords and interstitial tissue. Results were expressed as mean \pm SEM, and analyzed by ANOVA ($p < 0.05$). The sex cord diameter was lower in the treated group (33.3 ± 0.16 versus 34.7 ± 0.14 microns μm , $p = 0.000$) and volume densities decreased in treated group compared with control group ($48.0 \pm 0.8\%$ versus $50.9 \pm 0.82\%$, $p = 0.001$). However sex cords volume densities was higher in treated group (51.9 ± 0.8 versus 49.0 ± 0.82 , $p = 0.001$). The morphological changes observed suggest an effect of prenatal betamethasone treatment on the fetal testis. Future studies are required to evaluate whether these changes persist in testes during puberty and adulthood.

34. THE EFFECT OF DIETARY VITAMIN D₃ ON THE MIDGUT GLAND HISTOMORPHOLOGY OF THE CULTURED SHRIMP *Pleoticus muelleri*

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Food is the most influential factor in the physiological condition of crustaceans. Liposoluble vitamins are essential to keep the nutritional and sanitary status in perfect conditions; vitamin D₃ is very important for the calcium metabolism. The midgut gland (HP) presents 4 cell types: B, E, F, and R. The last two react with different diets, being indicators of nutritional stress. This research has evaluated the effect of different levels of vitamin D₃ in the HP of the shrimp *Pleoticus muelleri* through 5 semipurified diets: 0, (D0); 8.000 (D8); 15.000 (D15); 30.000 (D30) and 40.000 (D40) UI vitamin D₃/kg diet. P14 was used as a factor of control, nutritionally complete diet. Groups of 8 individuals of 4 grs were tested during 9 weeks within aquariums of 150 liters (salinity 33‰; 18°C; pH 7; 11:13 hs l-d). At the end of each experiment, the animals were animals were cricoanesthetized and were determined of molting stage. The HP of shrimp in intermolt stage were extracted, fixed and processed for light microscopy. The result of the histological study showed that the HP of the shrimps fed on diets D0 and PL4 presented well-preserved morphology and cytology. In the rest of the diets, a rise in the cellular and histomorphological deterioration was observed in the following order: D8 < D30 < D15 < D40. This last treatment (D40) registered a severe damage of the organ and foamy cells, an increase in the tubular lumen, an ondulation in the basement membrane, and there was not cellular differentiation between E, B, and R as a consequence of nutritional stress.

35. THE EFFECT OF hCG TREATMENT ON OVARY RESPONSE IN ANESTROUS EWE LAMBS

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In order to reduce embryo mortality in ovine, gonadotropins as stimulating of luteal function have been used. The objective was to evaluate the effect of the human chorionic gonadotrophin (hCG) at day 12 post mating on ovary response in anestrous ewe lambs. Females Corriedale of 8 months of age were estrus induced with medroxyprogesterone and equine chorionic gonadotropin and mating with males of proven fertility. At day 12 post mating, females were given a single intramuscular injection of either physiological saline (control) or 300IU of hCG (hCG group). At day 42 post mating, 10 ewe lambs of control group and 9 of hCG group were euthanized. The reproductive tracts were collected, ovaries separate and morphologic characteristics recorded. The percentage of ewe lambs with multiple ovulation (EMO) was higher in hCG group than that in control group (77.8% vs. 20%; $P < 0.05$). However, weight (1.1 ± 0.4 g), greater and smaller ovary diameters (1.5 ± 0.3 and 1.1 ± 0.2 cm, respectively), greater and smaller corpora lutea diameters (1.1 ± 0.1 and 1.0 ± 0.5 cm, respectively) and number of follicles $\geq 4\text{mm}$ (3.2 ± 1.5) not show differences between groups ($P > 0.05$). In conclusion, the hCG administered at day 12 post mating affect the percentage of EMO without modify the ovary characteristics evaluated at day 42 of pregnancy.

Key words: hCG, anestrous, ovine, ovary.

36. THE EFFECT OF hCG TREATMENT ON UTERINE AND FETAL PARAMETERS OF EWE LAMBS IN NON-BREEDING SEASON

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Human chorionic gonadotrophin (hCG) has been employed in cyclic ewes with the objective of blocking luteolytic signals that prevent pregnancy establishment and to increase the conceptus growth. The objective was to evaluate the effect of the administration of hCG at day 12 of pregnancy on uterine and fetal variables in anestrous ewe lambs. Females Corriedale of 8 months of age were estrus induced with medroxyprogesterone and equine chorionic gonadotropin and mating with males of proven fertility. At day 12 post mating, females were given a single intramuscular injection of either physiological saline (control group) or 300IU of hCG (hCG group). At day 42 post mating, 10 ewe lambs of control group and 9 ewe lambs of hCG group were euthanized, reproductive tracts collected and uterine and fetal variables registered. No statistically differences were found between groups for uterine weight (240.0 ± 40.3 g); weight and number of caruncles in the pregnant horns (198.2 ± 34.4 g and 64.4 ± 15.2 , respectively) and fetal weight (6.5 ± 0.6 g). The length of pregnant horns tend to be higher in hCG group (17.3 ± 1.3 cm vs. 16.0 ± 1.8 cm, $P = 0.08$). The cranium-caudal length was higher in hCG group compared to control group (5.3 ± 0.3 cm vs. 5.0 ± 0.3 cm $P = 0.05$). In conclusion, the administration of hCG at day 12 post mating no modify uterine characteristics, however it increased the cranium-caudal length.

Key words: hCG, anestrous, ovine, pregnant horns, foetus.

A		Flores Quintana CI	11	O	
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Bode F	23	H		Rivolta M	29
Bonino F	1	Hernández SZ	24	Rolando A	2
Boviez J	6, 24	Hernando AB	20	Romanini MC	2
Boviez JD	10			Rossi LF	14
Brunel A	23	I		S	
Bustamante C	9	Idiart JR	3	Saccomanno DM	24
		Irigoyen S	9	Sacristán H	26
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