

**CERCETĂRI HISTOLOGICE PRIVIND RINICHIUL  
LA SPECIA PHASIANUS PHASIANUS**

**HISTOLOGICAL RESEARCHES CONCERNING THE KIDNEY IN  
PHASIANUS PHASIANUS**

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**Cuvinte cheie:** fazan, rinichi, histostrucură.

**Key words:** pheasant, kidney, histostructure.

**SUMMARY**

The structural elements of nephron are differentiated in pheasant kidney. Malpighi corpuscles are obvious and the uriniferous tubes present a cubic or prismatic epithelium depending on their level morphological organization. Microvils were noticed at the apical pole of the nephrocites. The collecting tubes have a medullary disposition and present a simple cubic epithelium. There can also be seen the interstitial conjunctive tissue as well as the intra and extralobullary vessels. There are 3 types of nephrons in the renal lobule: the cortical, medullar and intermediary type. The cortical and medullar areas are not clearly delimited unlike the mammals case. The renal corpuscles prevail in the cortical area while the collecting tubes and Henle loops are placed in the medullary area.

## **MICRO AND MACROSCOPIC MORPHOLOGY**

### **NOI DATE DE MICROSCOPIE OPTICĂ ȘI MICROSCOPIE ELECTRONICĂ REFERITOARE LA ACȚIUNEA VITAMINEI A ȘI D ASUPRA ȚESUTULUI OSOS EMBRIONAR NEW OPTIC AND ELECTRONIC MICROSCOPY DATA REGARDING VITAMIN A AND D ACTION ON THE EMBRYON BONE TISSUE**

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**Cuvinte cheie:** teratogen, embrion, țesut.

**Key Words:** teratogen, embryo, tissue.

#### **SUMMARY**

This study refers to the microstructure of the embryo bone tissue in A hypervitaminosis (15.000 UI/day/kg) and D hypervitaminoses (10.000 UI/day/kg).

The experiment was conducted on pregnant rat Wistar females. These two vitamins were administered simultaneously, per os, for five days, starting with day 12 of pregnancy. The animals were sacrificed during day 22 of gestation (at the end of organogenesis).

The anatomic material (embryo femur) was studied using both electronic and optic microscopes.

During the study the following was noticed: vitamin A intensifies the peritoneal osteoblasts multiplication and activity, with accumulation of organic matrix and collagen fibers. Vitamin D, in teratogen dosage, accelerates the growth and lysis of the osteocytes and activates the osteoclasts, in the end producing demineralisation - resulting a fragile and rarefied periosteal bone. This process results also in growth of serum calcium levels.

**ASPECTE MORFOTOPOGRAFICE SI HISTOSTRUCTURALE  
ALE FICATULUI LA PREPELITA JAPONEZA (*COTURNIX  
COTURNIX JAPONICA*)**

**MORPHOTOPOGRAPHICAL AND HISTOSTRUCTURAL  
ASPECTS CONCERNING JAPANESE QUAIL LIVER (*COTURNIX  
COTURNIX JAPONICA*)**

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Cuvinte cheie: ficat, hepatocite, vezică biliară.  
Key words: liver, hepatocytes, gall bladder.

**SUMMARY**

These researches evidenced a series of macro- and microscopical particularities of the liver in the Japanese quail and have as initial point the limited date in the literature, as well as some ambiguous references.

The study was carried on subjects belonging to *Coturnix coturnix japonica* species, of different ages and sexes, insisting from the first day of life, and all through maturity, on the finalization of the hepatic characteristics. The aspect of the lobules, right and left, is presented, with details that belong to its margins and its sides, dorsal and especially the ventral one, where the absence of the gall bladder can be observed. The hepatic duct is described also. Up next is the approach of the histostructural elements, which is interested in the hepatocytes arrangement in concordance with the modality of sectioning of the organ fragments, the lobular structure, the aspect of the bile canaliculus, next to the one of the sinusoid capillaries and that of the centro-lobular and interlobular veins.

**CARACTERIZAREA HISTOSTRUCTURALA EVOLUTIVA POST-  
ECLOZIONALĂ A PESSULUSULUI LA PREPELITA JAPONEZA  
(COTURNIX COTURNIX JAPONICA)**

**THE POST-HATCHING EVOLUTIVE HISTOSTRUCTURAL  
CHARACTERIZATION OF THE PESSULUS IN THE JAPANESE  
QUAIL (COTURNIX COTURNIX JAPONICA)**

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Cuvinte cheie: pessulus, mucoasă, cartilaj hialin.  
Key words: pessulus, mucosa, hyaline cartilage.

**SUMMARY**

Stage of a complex study of microscopical morphology concerning the respiratory apparatus in the Japanese quail, the histostructural description of the pessulus catches the evolution of the transformation of which this syringeal segment covers at birds in the first days of life, compared to the constant structure at the adult subjects.

The researches characterize the particularities of the pessulus's mucosa, which is especially interested of the aspect of the mucous glands integrated in its structure. After this, it described the hyaline cartilage of sustain piece, at very young birds, which, at the adult exemplaries ossifies and modify their shape. The ventral region of the pessulus is as well analised, along side with the area of the origin of the tympanic membranes.

# THE CYTOLOGY OF THE SEMINIFEROUS TUBULES AT SWINE

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Key words: testis, boar, interstitial endocrinocytes.

## SUMMARY

The interstitial gland of the testis is structured in cords of interstitial endocrinocytes (Leydig cells), located around the spaces between the seminiferous tubules, in direct contact with the intrinsic vascularization.

In this paper the interstitial gland at boars of different ages (from 7 to 180 days), and of different breeds (Great White, Duroc, Landrace, Landrace synthetic line Peris), following the morpho-structural dynamic according to age. The deeds presented bring new contributions to the knowledge of the development of the testicular parenchyma at boars.

At the age of 7 days, the interstitial cells are present in the intertubular space, but reduced in number. There are relatively few blood capillaries. These aspects indicate the to carry on process of "insular" organization of the interstitial gland. At the age of 14 days an intense proliferation of the testicular endocrinocytes population, which becomes numerically doubled. The delimitation of the groups is better seen, and their vascularization is richer. At the age of 21 days, the aspects earlier mentioned emphasizes, in the cytoplasm of the interstitial endocrinocytes becomes intense eosinophil (acidophil), this signifies an intense preparation for starting of the secretory activity. At the age of 28 days, in the cytoplasm of the interstitial endocrinocytes, the presence of the lipid vacuoles the foamy aspect becoming more and more obvious. The volume of the endocrinocytes appears to be increased.

At the age of 35 days, we observed giant interstitial endocrinocytes, with euchromatic nucleus, with two visible nucleoli and vacuoles cytoplasm. At 60 days, new Leydig cells appear, that in the interstitial gland are seen endocrinocytes in different evolutionary and secretory phases. At 90 days the interstitial gland contains secretory active cells with numerous intracytoplasmic confluent vacuoles. At 120 days, the intracytoplasmic vacuoles structure prevails, which indicates an secretory activity. At 150-180 days, the Leydig cells reach a maximum of morphological development, as they find themselves in full process of secretion, deed indicated by the presence of the crystalloid inclusions (crystals of Reinke).

**MORFOLOGIA LIMFOCENTRULUI TORACAL  
LA IEPURE**

**THE MORPHOLOGY OF THE TORACAL LYMPHOCENTER IN  
RABBIT**

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**Cuvinte cheie:** limfonodurile toracale

**Key words:** the toracal lymphonodes.

**SUMMARY**

The toracal lymphocenters includes:

- the axilares lymphonodules are represented by 3 lymphonodules:
  - the axilar principal lymphonodules
  - the paraacromial lymphonodules
  - the accessorii lymphonodules

Limfocentrul membrului toracic este reprezentat de limfocentrul axilar care la randul lui este format din:limfonodurile axilare proprii,limfonodurile axilare accesorii si limfonodurile paraacromiale.

## **CERCETĂRI MICROSCOPICE ALE LIMFOCENTRILOR TORACALI LA LEPORIDE**

### **MICROSCOPICAL RESEARCHES OF THE TORACAL LYMPHOCENTERS IN RABBIT**

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Cuvinte cheie: limfocentrii toracali, capsula, parenchim, corticala, medulara, leporide  
Key Words: toracal lymphocenters, the capsule, parenchyma, cortex, medullar, rabbit

#### **SUMMARY**

After the histological study it can see that the toracaly lymphocenters have an elastic and thin capsule, in which are existing rare smooth muscle fibres, too.

Between the capsule and parenchyma exist some large subcapsular sinuses. The parenchyma of the cortex can be clear, distinguish from that of the medulla through the density of the cellular population and through a more intense basophily.

In the medullar zone, the follicular cordons are poorly outlined, the basophily is less marked, and the nodules are absent.

The diffuse or profound cortex appears poorly distinguished from the cortex at rabbit, but it is clear distinguished from the medulla.

**STUDIUL VASCULARIZAȚIEI ENCEFALULUI LA CÂINE PRIN  
REZONANȚĂ MAGNETICĂ NUCLEARĂ**

**THE STUDY OF VASCULARISATION OF THE ENCEPHALON IN  
DOG THROUGH NUCLEAR MAGNETIC RESONANCE**

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**Cuvinte cheie:** câine, vascularizație, encefal, rezonanță magnetică nucleară.

**Key words:** dog, vascularisation, encephalon, nuclear magnetic resonance.

**Summary**

Arterial vascularisation of the encephalon in neurological healthy dogs is very important for interpretation of the vascular disorders of the internal carotid artery and its branches.



**NEUROANATOMIA ENCEFALULUI LA CÂINE CLINIC  
SĂNĂTOS DETERMINATĂ PRIN REZONANȚĂ MAGNETICĂ  
NUCLEARĂ**

**NEUROANATOMY OF THE ENCEPHALON IN HEALTHY DOG  
THROUGH NUCLEAR MAGNETIC RESONANCE**

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**Cuvinte cheie:** câine, encefal, rezonanță magnetică nucleară.

**Key words:** dog, encephalon, nuclear magnetic resonance.

**Summary**

The description and determination of the components of the encephalon through the nuclear magnetic resonance in neurological healthy dogs are very important for the evaluation of the tomograms and thus for the diagnostic of the disorders in the encephalon.

**CONSIDERAȚII COMPARATIVE ÎN EVIDENȚIEREA COLOANEI  
VERTEBRALE LA CÂINE PRIN RMN, RĂGIMURILE DE  
SCANARE SAGITAL ȘI CORONAR**

**COMPARATIVE CONSIDERATIONS OF THE VERTEBRAL  
COLUMN IN DOG THROUGH NUCLEAR MAGNETIC  
RESONANCE**

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**Cuvinte cheie:** RMN: câine, coloană vertebrală.

**Key words:** nuclear magnetic resonance, dog, vertebral column.

**Summary**

The disorders of the vertebral column in the thoraco-lumbar region are very common in dogs.

To establish the diagnostic of the disorders is very difficult, being necessary imagistic investigations such as radiography, CT and MMR.

**STUDIUL EXPERIMENTAL COMPARATIV AL IMPLANTELOR  
DE INOX ȘI TITAN PE OASE DE CÂINE**

**THE COMPARATIVE EXPERIMENTAL STUDY OF THE INOX  
AND TITANIUM IMPLANTS IN DOG**

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**Cuvinte cheie:** implante, oase, câine.

**Key words:** implant, bone, dog.

**Summary**

In the bone fractures the implants have a very important role in the management of the healing fractures and in the osseous consolidation in dogs. The study presents the mechanical behavior of the inox and titanium implants during induced stress.

**ANATOMIA TOPOGRAFICĂ A REGIUNII SUBLOMBARE LA  
CÂINE PRIN RMN**

**TOPOGRAPHICAL ANATOMY OF THE SUBLUMBAR REGION  
IN DOG THROUGH NUCLEAR MAGNETIC RESONANCE**

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**Cuvinte cheie:** câine, regiune sublombară, RMN.

**Key words:** dog, sublumbar region, nuclear magnetic resonance.

**Summary**

The diversity of the anatomical features in the sublumbal region and the topographical relationship between its components were determinate through nuclear magnetic resonance.

The tomograms were compared according with the literature and the topographical features of the organs and great vessels were described.

**STUDIUL FARINGELUI ȘI LARINGELUI LA CÂINE PRIN RMN**  
**THE STUDY OF PHARINX AND LARINX IN DOG THROUGH**  
**NUCLEAR MAGNECTIC RESONANCE**

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**Cuvinte cheie:** RMN, laringe, faringe, câine.

**Key words:** nuclear magnetic resonance, pharinx, larinx, dog.

**Summary**

The nuclear magnetic resonance provides the high resolutions images for anatomical descriptions and creates detailed anatomical images.

Clinical examination of the pharynx and larynx are limited and are more traumatically.

**CERCETĂRI HISTOLOGICE PRIVIND LIMBA  
LA SPECIA STRUTHIO CAMELUS**

**HISTOLOGICAL RESEARCHES CONCERNING THE TONGUE  
IN STRUTHIO CAMELUS**

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**Cuvinte cheie:** struț, limbă, histostrucură.  
**Key words:** ostrich, tongue, histostructure.

**SUMMARY**

In the speciality literature, the informaton about the histostructure of the tongue in ostrich (*Struthio camelus*) are extremely rare, many of them referring to the *Gallus domesticus* species.

The tongue is an narrow organ which has its root towards the pharynx and has pharyngeal origin although, most of it can be found in the oral cavity. It has very little mobility (only movements of propulsion and retropultion), the apex sharp in *Galliformes* and rounded in *Anseriformes* and *Strutioniforme*. All its' surface is crossed by entoglossal bone. The musculature of the tongue appears to be reduced than in mammals, and the mucosa has keratinized epithelium, with numerous filiform papillae. The apex is keratinized in *Galliformes* and softly in *Anseriformes* and *Strutioniforme*.

## **MORPHOTOPOGRAPHY OF THE CAELIAC ARTERY IN GOOSE**

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### **SUMMARY**

Due to the fact that the specialized literature has summary data, some of them contradictory in what concern the vascular of the digestive tube in domestic bird anatomy, I have considered necessary the elaboration of this study regarding the distribution of the caeliac artery.

## **MORPHOTOPOGRAPHY OF THE CAELIAC ARTERY IN GALLUS DOMESTICUS**

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### **SUMMARY**

Due to the fact that the specialized literature has summary data, some of them contradictory in what concern the vascular of the digestive tube in domestic bird anatomy, I have considered necessary the elaboration of this study regarding the distribution of the caeliac artery.