

**INFLUENȚA IMUNOMODULATORULUI POLIDIN ASUPRA  
UNOR PARAMETRI HEMATOLOGICI ȘI  
SEROLOGICI LA IEPURE  
POLIDIN IMMUNOMODULATOR INFLUENCE UPON SOME  
HAEMATOLOGICAL AND SEROLOGICAL  
PARAMETERS IN RABBIT**

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**Cuvinte cheie:** polidin, imunomodulatori, iepure

**Key words:** polidin, immunomodulators, rabbit

**SUMMARY**

The purpose of this paperwork was to assess the Polidin immunomodulator influence upon both leukocitary dynamics and antibody titres.

The researches were carried out on 7 rabbits, distributed into 2 groups: experimental and control group. The experimental group were stimulated, at spaces of two days, by 1 ml of Polidin, parenterally administered. Both groups were inoculated two times, at 14 days distance, with La Sota virus strain. Blood samples were taken from each rabbit, at the beginning of the experiment, and 14 days after each vaccination.

The outcome was that Polidin had determined the improvement of the humoral immune response, in experimental group, the antibody titre being higher than that in the control group. Regarding the leukocitary dynamics, in the case of the experimental group, we recorded an increase of the leukocyte count at the end of the experiment, compared to the initial value. This increase had occurred after the second antigenic stimuli, especially due to lymphocytes. Heterophils had also recorded an increase, but only after the first antigenic stimuli.

At the control group were noted only increases of the monocyte number, after each antigenic inoculation.

**STUDII PRIVIND ELECTROCARDIOGRAMA LA OBOLANII  
SPRAGUE-DOWLEY CĂTORĂ LI S-AU ADMINISTRAT PER OS  
UNELE PREPARATE FITOTERAPEUTICE**

**STUDIES CONCERNING THE ELECTROCARDIOGRAM AT  
RATS SPRAGUE-DOWLEY WHO WERE ENTERAL  
ADMINISTRATED OF SOME PHYTOTHERAPEUTICAL DRUGS**

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**Cuvinte cheie:** preparate fitoterapeutice, electrocardiografie, obolani

**Key words:** phytotherapeutical drugs, electrocardiogram, rats

**SUMMARY**

The investigated phytotherapeutical drugs were obtained by a 7 days cold hydroalcoholic extraction (mechanical agitation) from: *Achillea millefolium*, *Melissae officinalis* and *Ocimum basilicum*. The experimental investigation were made on young rats received ad libitum in the drinking water, the phytotherapeutical drugs 1/10 dilution, for 60 days and the controls received a 1/10 dilution of the ethylic alcohol 60°.

At the end of the experimental period, the rats have been investigated clinical and paraclinical, the electrocardiogram was done with a Moniplat 102-B machine.

It was notice the presence of a ventricular electrical right axel deviation, which indicates a ventricular hypertrophy, in special at the rats that received the phytotherapeutical drugs composite *Melissae officinalis*; or the consequence of overstressing the right ventricle. But, the same tendency of right axel deviation it's observed also to the rats in the control lot, which denotes that administration of the phytotherapeutical drugs, didn't led to damage of the three experimental lots, who received hydroalcoholic extraction of: *Achillea millefolium*, *Melissae officinalis* and *Ocimum basilicum*.

**ASPECTE HISTOPATOLOGICE LA OBOLANI CONSECUTIV  
ADMINISTRĂRII ENTERALE A  
UNOR PREPARATE FITOTERAPEUTICE**

**HISTOPATHOLOGICAL ASPECTS FOLLOWING THE ENTERAL  
ADMINISTRATION OF SOME PHYTOTHERAPEUTICAL  
DRUGS IN RATS**

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**Cuvinte cheie:** preparate fitoterapeutice, histopatologie, obolani

**Key words:** phytotherapeutical drugs, histopathological, rats

**SUMMARY**

The investigated phytotherapeutical drugs were obtained by a 7 days cold hydroalcoholic extraction (mechanical agitation) form: *Achillea millefolium*; *Melissae officinalis* and *Ocimum basilicum*. The experimental investigations were made on young rats that received ad libitum in the drinking water, the phytotherapeutical drugs. The extract was filtrated then diluted to 1/10 by water, for 60 days and the controls received a 1/10 dilution of the ethylic alcohol 60°.

At the end of the experimental period the rats were anesthetized, examined microscopically, and then probes were taken from the liver and kidney for the histopathological exam. There were used two coloring techniques for the section of liver and kidney, coloring with hematoxylin and eosin (HE) and the altered McManus method. At the rats from the witness lot the histostructure of the liver and kidney was normal but there were put in evidence rare isolated hepatocytes, with homogenous cytoplasm, and nucleus, without a pathological signification. At rats treated with *Ocimum* it was remarked general hepatitis with the tumefaction of the hepatocytes and the decrease of the lumen of sinusoides capillars.

The rats treated with *Melissae* presented a normal general architecture, but there were put in evidence rare hepatocytes with degenerative modifications, more pronounced than at rats from the other experimental lots. In other hepatocytes there are visible basophile corpuscular formations due to cariorexis, distributed non-uniform. The determined modifications could be the result of the reduce hepatotoxicity action of the phytotherapeutical drug *Melissa*. At the rats treated with the phytotherapeutical drug *Achillea* there were evidenced aspects of hepatitis granular with the tumefaction of the hepatocytes but with conserving their integrity. The most intense hepatocitary alterations were surprised at rats treated with *Achillea*, but without presenting necrotic phenomena fibrinogens or inflammatory reactions.

**MODEL EXPERIMENTAL PENTRU APRECIEREA AC IUNII  
FLOGISTICE A UNOR PREPARATE FITOTERAPEUTICE PRIN  
UTILIZAREA TERMOGRAFIEI ÎN INFRARO U**

**EXPERIMENTAL MODEL FOR THE APPRECIATION OF THE  
PHLOGISTIC ACTION OF SOME PHYTOTHERAPEUTIC DRUGS  
BY USING INFRARED THERMOGRAPHY**

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**Cuvinte cheie:** preparate fitoterapeutice, termografie în infraro u, iepuri

**Key words:** phytotherapeutical drugs infrared thermogrphy, rabbits

**SUMMARY**

In terms of appreciating the phlogistic action of some phototherapeutic preparation it was imagined an experimental model on a rabbit, following the vascular modifications of the conjunctive mucous of the eyeball, by appreciating the local temperature using infrared thermography. Utilization of infrared thermography for appreciating the local modifications of the temperature in the course of the inflammatory reaction in the mucous conjunctive at the rabbit's eyeball on the influence of aqueous extracts of: A.c – *Achillea collina* (yarrow); O – *Ocimum basilicum* (basil); M – *Melissae folium* (balm); and also the solutions: C-1 – hidroalcoolic solution; C-2 – aqueous solution.

The thermography resultus of the eyeball shown that the temperature of the left eyeball was higher at the rabbits instilled with the phototherapeutic preparations Ac and O. In general the temperature of the eyeball was higher when in the conjunctive sacs where instilated with terebentin esent and the phototherapeutic preparation of Ac, O and M.

# APRECIEREA COMPARATIVĂ A STATUSULUI REDOX LOCAL, ÎN TUMORI DIAGNOSTICATE LA CÂINE COMPARATIVE EVALUATION OF LOCAL REDOX STATUS IN A FEW CANINE TUMORS

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**Cuvinte cheie:** malondialdehida, ceruloplasmina, tiolii totali, esut tumoral, esut peritumoral.

**Key words:** malondialdehyde, ceruloplasmine, total thiols, tumoral tissue, peritumoral tissue.

## SUMMARY

The implications of oxidative stress in carcinogenesis is still a complex and controversial subject. Increasing *in vivo* and *in vitro* studies show that malignant cells undergo an intense and persistent oxidative stress by comparison with normal cells, as a result of high generation of reactive oxygen metabolites (ROS), but also the suppression of some antioxidant enzymes. Persistent generation of oxidants in tumoral tissue could induce adaptative reactions in cancer cells, with a subsequent selection of more resistant malignant clones to oxidants and anti-cancer drugs.

In this paper we have attempted to evaluate comparatively the local redox status in tumoral and normal adjacent (peritumoral) tissue for eight canine tumors developed in dogs of different breeds and ages, males and females. The evaluation consisted in measurement of malondialdehyde, ceruloplasmine and total thiols, analyzing the possible correlations of these redox parameters between tumoral and peritumoral tissue. In all cases, the most surprising difference between the two compartments was represented by significant increasing of total thiols concentration in peritumoral area that may indicate an adaptative reaction protecting the host tissue from the oxidative injury locally induced by tumor development.

**INVESTIGAREA CLEARANCE-ULUI UNOR MOLECULE ACTIVE  
UTILIZATE ÎN TERAPIA ANTIHELMINTIC LA CÂINE**

**CLEARANCE INVESTIGATION FOR DIFFERENT ACTIVE  
SUBSTANCES USED AS ANTHELMINTIC DRUGS IN DOG  
THERAPY**

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**Cuvinte cheie:** clearance, fenbendazol, pyrantel, praziquantel, câine

**Key words:** clearance, fenbendazole, pyrantel, praziquantel, dog

**SUMMARY**

The researches was made on 6 healthy dogs (n=10) from Romanian shepherd bred. All the dogs received a single oral tablet with - 214,9 mg fenbendazole, 107.6 mg pyrantel and 52.1 mg praziquantel (test - Anipratel - VIM SPECTRUM GRUP) and after 14 days, a second administration using a reference product with 200 mg fenbendazole, 144 mg pyrantel and 50 mg praziquantel. Before and after each administration of drugs, were collected blood samples at various time intervals: 0.0, 0.5, 1.0, 1.5, 2.0, 4.0, 8.0, 12.0, 24.0, 36.0, and 48.0 hours.

For all this 3 substances, the general tendency of plasmatic concentration was characterized by ascendance curve from initial time (0) till 1-2 hours. The value of halftime was between 1.70 hours (pyrantel) till 70.32 hours (paraziquantel), this variable was caused by the different dose of active substance. The value of renal clearance was significant for the turnover and the excretion of active ingredients; the value of this was different according with each animal and active substances (101.98-395.32 l/h for fenbendazole, 15.6-98.12 l/h for pyrantel and 13-75.2 l/h for praziquantel)

General and statistic analyze of followed pharmacological parameters reveal the possibility that the fenbendazole from this two products can be different metabolized because of the different used dose.