A NEW PHYTOTHERAPEUTIC PRODUCT INVESTIGATED FOR ITS ACTION IN CERTAIN ALLERGIC DERMOPATHIES FOR FELINES

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Abstract: The authors present a study on a phytotherapeutic, indigenous product with high potential for use in veterinary medical practice. This product has a complex action and proves effectiveness even in some of the allergic dermopathies at felines. For this reason, the authors chose to certify the action of their new phytotherapeutic product, namely Arsutrat-Plagotrat by testing in the veterinary clinics of the Faculty of Veterinary Medicine of Bucharest. Studies are concerned with revealing its reliability in the cases of different allergic dermatitis, both as adjuvant in therapy and independent product.

Keywords: veterinary medical practice, phytotherapeutic product, feline eosinophilic complex

1. Introduction

The phytotherapeutic product Arsutrat-Plagotrat gel has been designed for use in veterinary practice on the strength of its wealth in natural ingredients with synergistic activity conferring decongestants, anti-inflammatory, healing, analgesic properties and supporting the regeneration of damaged skin tissue.

This new natural product has proven efficacy in numerous pathologies especially in surgical veterinary pathology. On the other hand, we have decided to emphasize its action in dermatologic pathologies on the basis of the priority that dermopathies deal in feline disease occurrence, the most common forms being the allergic dermopathies.

In this category, several cases of Allergic dermatitis were studied, clustered under the universal heading of “feline eosinophilic complex” with different etiologies: food allergic dermatitis, atopic dermatitis, contact dermatitis caused by hypersensitivity to stings of haematophagous insects. For each category, therapeutic allopathic protocols do exist, used with more or less effectiveness in curing such cases.

For this reason, the authors chose to certify the action of their new phytotherapeutic product, Arsutrat-Plagotrat by testing in the veterinary clinics of the Faculty of Veterinary Medicine of Bucharest. Studies are concerned with revealing its reliability in the cases of different allergic dermatitis, both as adjuvant in therapy and independent product.

The administration of Arsutrat-Plagotrat gel to cats within the survey was decided on the basis of establishing a positive and differential diagnosis by clinical and paraclinical examination in comparison with other diseases (skin parasitosis, autoimmune diseases, bacterial and fungal diseases), which clinically display by the same signs, namely: itching and localized or diffuse hypotrichosis.

2. Materials and working procedure

During 2015, a total of 30 cats with various allergic dermatitis were taken into the study, and treated with Arsutrat-Plagotrat gel following the diagnosis. Among all, 12 cases were chosen for presentation (the most representative in revealing the efficacy of treatment). Those cats were of different breeds and different ages and brought by their owners to the veterinary clinics of Faculty of Veterinary Medicine of Bucharest since suffering from various skin diseases.

After selection, the cases taken into study reached the dermatologic clinic where owners were questioned to obtain a thorough history of the space where the animals lived, were fed, of the antiparasitical treatment carried along time, etc. They were then passed to a detailed clinical examination, with high care on the aspect and topography of wounds.

In order to obtain each dermatological diagnosis, compulsory laboratory tests were conducted (biochemical and hematological). Also, they were submitted to the cytornorphological exam of skin lesions (either by biopsy or by scraping or footprint) where skin samples were displayed on slides, and stained panoptic MGG after drying.

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To exclude a dermatophytosis, Wood's lamp examination was performed and eventually mycological examination by sowing hairs and scraped skin on Sabouraud media with Chloramphenicol. Moreover, a bacteriologic test with antibiogram was carried out when lesions got over infected for starting the treatment with antibiotics.

To avert a food allergy, an exclusion diet was established using industrial food with hydrolyzed protein, hypoallergenic or non-allergenic and monoproteic, classic food.

3. Results and discussions

From the 12 studied cases of allergic dermatopaties framed in the "feline eosinophilic complex", 6 cases were diagnosed with atopic dermatitis: 5 cases of food dermatitis, 1 case of dermatitis caused by insect stings (fleas).

For each of the 12 cases, details upon the clinical signs presented by the subjects, as well as the performed laboratory investigations are centralized in Table 1. It also includes the diagnostic, the applied treatment and some useful remarks for each subject.

Table 1

<table>
<thead>
<tr>
<th>No</th>
<th>Subject</th>
<th>Clinical signs</th>
<th>Laboratory Investigations</th>
<th>Diagnosis</th>
<th>Treatment</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feline Mixed breed Male 5 years</td>
<td>Single nodular lesion with exude Coalescent papules and plaques Pruritus</td>
<td>Cytologic examination Trichoscopic examination Parasitological examination by repeated dermal scraping Direct examination Hemocleogram</td>
<td>Eosinophilic granuloma at abdominal level Atopic dermatitis</td>
<td>Anti-biotherapy Cephalexin; Local: Arsutrat-Plagotrat, 26 days</td>
<td>An Elizabethan collar was applied Total healing in 26 days</td>
</tr>
<tr>
<td>2</td>
<td>Feline European Male 5 years</td>
<td>Erythema, erosion, scaling, scratching lesions, hypotrichosis located on the external pinna of the left ear, pruritus</td>
<td>Parasitological examination Direct examination Skin cytological examination Wood lamp test Microbiologic examination Hemocleogram</td>
<td>Atopic dermatitis</td>
<td>Anti-biotherapy Cephalexin Local: Arsutrat-Plagotrat, 4 weeks</td>
<td>An Elizabethan collar was applied Total healing in 30 days</td>
</tr>
<tr>
<td>3</td>
<td>Feline Angora Mixed breed Female 11 years</td>
<td>Localized hypotrichosis, scabs, scratching lesions Pruritus</td>
<td>Parasitological examination Direct examination Skin cytological examination Trichoscopic examination Wood lamp test Hemocleogram</td>
<td>Food allergic dermatitis</td>
<td>Diet: Z/D Hill’s Ultra Allergen free Local: Arsutrat-Plagotrat, 3-4 weeks</td>
<td>Pruritus intensifying during first days, that was succumbed after 5 days An Elizabethan collar was applied</td>
</tr>
<tr>
<td>4</td>
<td>Feline Mixed breed Female 3 years</td>
<td>Localized hypotrichosis, scratching lesions, scabs on the pinna Ulcers in the lower abdomen</td>
<td>Parasitological examination Direct examination Cytologic examination Trichoscopic examination Wood lamp test Mycological examination Hemocleogram</td>
<td>Food allergic dermatitis</td>
<td>Non-allergic diet with hydrolyzed protein Antibiotic: Cephalexin Local: Arsutrat-Plagotrat</td>
<td>Total healing after 4 weeks of treatment</td>
</tr>
<tr>
<td>5</td>
<td>Feline European</td>
<td>Ulcerations on ventral cervical region Crusts on the inner</td>
<td>Direct examination Parasitological examination Wood lamp test Skin cytological</td>
<td>Food allergic dermatitis</td>
<td>Non-allergic diet with hydrolyzed protein Antibiotic:</td>
<td>An Elizabethan collar was applied Slow healing in 46 days, because of the</td>
</tr>
<tr>
<td>Case</td>
<td>Breed</td>
<td>Gender</td>
<td>Age</td>
<td>Lesions</td>
<td>Tests</td>
<td>Diagnosis</td>
</tr>
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<td>------</td>
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<tr>
<td>5</td>
<td>Male</td>
<td>14 years</td>
<td>Pruritus</td>
<td>Examination Biochemistry test: Kidney failure Hematologic examination Peripheral blood cytological examination</td>
<td>Food allergic dermatitis</td>
<td>Pradofloxacin Local: Arsutrat-Plagotrat, 46 days</td>
</tr>
<tr>
<td>6</td>
<td>Feline</td>
<td>Mixed</td>
<td>Hypotrichosis and Scratching lesions on the external side of thighs Intense pruritus</td>
<td>Parasitological examination Hemocytoclogram Peripheral blood cytological examination Skin cytological examination</td>
<td>Hypersensitivity reaction to flea bites</td>
<td>External disinfection and habitat disinfection dermatological diet Local: Clorhexidine Solution Arsutrat-Plagotrat, 22 days</td>
</tr>
<tr>
<td>7</td>
<td>Feline</td>
<td>European</td>
<td>Crusts and hypotrichosis localized at shoulders</td>
<td>Parasitological examination Direct examination Skin cytological examination</td>
<td>Atopic dermatitis</td>
<td>Non-allergenic diet with hydrolyzed protein Local: Arsutrat-Plagotrat, 18 days</td>
</tr>
<tr>
<td>8</td>
<td>Feline</td>
<td>European</td>
<td>Female</td>
<td>Localized hypotrichosis and pruritus at lower abdominal level</td>
<td>Parasitological examination Direct examination Skin cytological examination Hemocytoclogram</td>
<td>Food allergic dermatitis</td>
</tr>
<tr>
<td>9</td>
<td>Feline</td>
<td>British Short Hair</td>
<td>Male</td>
<td>Erythematous lesion with ulcerative areas, dark brown scabs on the muzzle (cheeks) Intense pruritus.</td>
<td>Wood lamp test Parasitological examination Direct examination Cytological examination Bacteriological examination Hemocytoclogram</td>
<td>Atopic dermatitis</td>
</tr>
<tr>
<td>10</td>
<td>Feline</td>
<td>European</td>
<td>Male</td>
<td>Scratching lesions, erythema, hypotrichosis of the face</td>
<td>Wood lamp test Parasitological examination Direct examination Cytological examination Hemocytoclogram</td>
<td>Food allergic dermatitis</td>
</tr>
<tr>
<td>11</td>
<td>Feline</td>
<td>European</td>
<td>Female</td>
<td>Hypotrichosis located in the lower limbs, abdomen and right forelimb</td>
<td>Wood lamp test Mycological examination Parasitological examination Direct examination Cytological examination from scraped skin Hemocytoclogram</td>
<td>Atopic dermatitis</td>
</tr>
</tbody>
</table>
According to the established dermatological diagnosis, several types of therapies were used:

- In over-infected allergic dermatitis, after realizing the antibiogram exam, it was necessary to administer antibiotics, followed by topical application of the Arsutrat-Plagotrat gel.
- Both for food allergic dermatitis and atopic dermatitis, a certain diet was established simultaneously with local application gel of Arsutrat-Plagotrat gel.
- In case of allergic dermatitis caused by haematophagous insect bites, an external delousing was repeatedly conducted both for the affected animals and of potentially of cohabiting animals and repeated disinfection of their habitat.
- In some cases, due to increased itching and after applying the gel, it was necessary to put a collar around the cat’s neck to limit head movements and to prevent licking.

The location of allergic dermatitis lesions was varied; anatomic clinical issues were also very different: redness, scratching lesions, erosions, ulcers, nodular formations, eventually with purulent exudate etc.

In feline dermopathies and especially those that are allergic, in order to establish a positive and differential diagnosis, a very laborious investigation was required, namely the use of numerous laboratory tests to exclude other diseases that clinically manifest by itching, scratching, hypotrichosis/alopecia.

Results are also presented by the means of pictures showing the evolution of the most representative cases.
4. Conclusions

As generally known, "feline eosinophilic complex" includes allergic diseases often seen in feline pathology. In our study, atopic dermatitis and food allergies were the most common. For the diagnosis of allergic dermatopathies, serological tests for IgE and intradermal tests were not employed as considered irrelevant diagnostic methods for cats.

In allergic dermatitis belonging to "feline eosinophilic complex", for the cytological examination of peripheral blood, eosinophilia was observed not to be constant; differently, for the cytological test, the diagnosis was always confirmed.

The studied product, Arsutrat-Plagotrat gel, has proven very good results, both used as adjunct in the treatment of complicated dermatopathies and independent product, but always resorting to a diet for the subject.

The most important therapeutic value of the new product was found to be the possibility of use where corticotherapy could not be established, due to conditions such as kidney failure, etc.

Another observation was that, in the first days after applying the product, for some cats itching was intensified, imposing the use of "Elizabethan collar". In most cases, itching subsided after 3-5 days of treatment.

Re-epithelialization occurred in the first 3-5-7 days of treatment, followed by total remission in 3-4 weeks due to the difficulty of controlling the itching.

5. References

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