

METHODS OF PREVENTION AND TREATMENT OF TRICHOPHYTE IN CAUSE (literature analysis)

Usmanova Khadicha Juraevna –
doctoral student.

<https://orcid.org/0009-0005-6103-7389>

Veterinary Research Institute

Abstract: Effective treatment of trichophytosis in cattle with the effective use of systemic drugs. To do this, the animals infected with trichophytia should be divided into groups, each drug should be used and monitored every ten days. Early treatment is based on the results obtained. It consists of taking skin and wool samples from the recovered part of the disease in laboratory conditions, planting them in food, making differential diagnosis in other similar diseases, and studying the effects of the used drugs. Treatment in this way is to increase the productivity of farm animals and reduce the rate of transmission to humans. In addition to these, lecoformulation by taking blood samples from animals that have recovered from the disease. In this, the shaped elements of the blood are checked. The obtained results and each systemic drug used are formed on the basis of the scheme and entered in tabular form.

Annatsiya: Qoramollar trixofitiya kasalligini davolashda tizimli preparatlardan umumli foydalangan holda davolashni samarali amalga oshirish. Buning uchun trixofitiya bilan kasallangan hayvonlarni guruhlarga bo'lgan holda har bir preparatlarni qo'llab, har o'n kunda kuzatib borishdan iborat. Olingan natijalarga qarab davolashni erta amalga oshirishdir. Laboratoriya sharoitida kasallikdan tuzalgan qismidan teri va jun namunalari olinib oziq-muhitlarga ekib ko'rish va boshqa o'xshash kasalliklarda diferentsial diagnostika qilib, qo'llanilgan preparatlar ta'sitini o'rganishdan iborat bo'ladi. Bu usulda davolash qishloq xo'jalik hayvonlarni maxsuldorligini oshirish hamda odamlarga yuqish tezligini kamaytirishdan iboratdir. Bulardan tashqari kasallikdan tuzalgan hayvonlardan qon namunalari olinib lekoformula qilish. Bunda qonning shaklli elementlari tekshiriladi. Olingan natijalar va qo'llanilgan har bir tizimli preparatlar sxema asosida shakllantirilib, jadval ko'rinishda kiritish.

Key words: cattle, ectoparasites, dermatitis, trichophytia, ivermectin, multivitamin, LTF-130 vaccine, tetramak, flukonozol, butamine drugs are under research.

Kalit so'zlar: qoramol, ektoparazitlar, dermatit, trixofitiya, ivermektin, multivitamin, LTF-130 vaksina, tetramak, flukonozol, butamin kabi preparatlar tadqiqotlarda.

Introduction: Cattle diseases caused by ectoparasites are widespread in mountain and sub-mountain regions. Ectoparasites cause inflammation of the skin and other organs, which leads to discomfort, mechanical damage in the process of scratching, and a decrease in meat and milk products in cattle. For decades, chlorine, organophosphorus and carbamate drugs have been used in the fight against diseases of invasive origin. It should be noted that most of them do not



meet modern requirements due to their ineffectiveness, high toxicity for animals and humans, long-term accumulation and storage in the external environment and animal body.

Due to the unfavorable epidemiological and social situation in different countries of the world, the distribution, etiology, clinical course and treatment of zoonotic dermatomycosis, including trichophytosis, remain the focus of attention of both dermatovenerologists and health leaders [1,2;33b]

Despite the availability of many modern external and systemic pharmacological agents, their therapeutic effectiveness remains rather low, so the problem of treating dermatomycosis is relevant not only for veterinary medicine, but also for medicine [3,4,5,7,6,9,7]. .

It should be noted that vaccines against dermatomycosis (Vakderm, Poli-vac-TM, Microderm, etc.) are recommended for use in pets from 1-1.5 months of age. However, because the immune system is not well developed in newborn animals, they are very sensitive to pathogens and suffer from dermatomycosis, sometimes in severe form. [5,6;61-62,]

Many methods of treating trichophytosis in animals are known, including the use of used motor oil with up to 70% aromatic hydrocarbons, 10% water, traces of ferrous iron, chlorine, nitrogen and sulfur; mixtures of acetic acid with sulfur and diesel oil, 85% hexamide paste, 0.25% trichocetin suspension in fish oil or petroleum jelly, 3% aminophosphonic oil, juglone, 10-20% sulfuric acid, 10% sulfur and 3% salicylic mixture 10% sulfur tar ointments, lamisil, mycospor, clotriazole, etc.

For the treatment and prevention of trichophytosis, LTF-130 vaccines and drugs in the form of ointments or liniments are often used. The main antimycotic used in the treatment of trichophytosis is griseofulvin, the daily dose of which is equal to 18-25 mg / kg of body weight. Griseofulvin is taken daily until the first negative test, then daily for 2 weeks, then 2 more weeks at 3-day intervals. Griseofulvin is poorly soluble in water and causes side effects in the form of dyspeptic symptoms and urticaria [Malanin L.P., Morozov A.P., Selivanova A.S 1988].[6,7,8,9; 278-278-100-101].

In trichophytosis, acaricides from the ivermectin group were used for preventive and therapeutic purposes.

In production conditions, we used systemic drugs: systemic drugs - ivermectin and multivitamin, LTF-130 vaccine and tetramak, fluconazole and butamine, which had a good therapeutic effect in the treatment of a large number of small cattle in autumn and winter. Blood is a liquid medium of the body, through which organs, tissues and cells are filled with all nutrients and oxygen, as well as metabolic products are removed. A change in the morphological composition of blood is an indicator of metabolic diseases in the animal body. The purpose of the study: The purpose of our study was to study the clinical condition of the animal organism, the effect of these drugs before and after the treatment of trichophytosis in cattle.

Materials and methods. The experiment was conducted on 4-5-month-old calves with moderate obesity and live weight of 112-130 kg. Experimental animals were divided into four groups: three experimental and one control, each with four heads. Before the experiment, wool and affected skin samples were taken from all group animals for the study. The first experimental group: animals were injected with LTF 130 vaccine 5.0 ml, tetramak 5.0 ml into the thigh muscles, the second experimental group: ivermectin was injected subcutaneously into the forearm in a dose of 5.0 ml, multivitamin 5.0 ml into the thigh muscle. The third experimental

group: a mixture of fluconazole 150 ml and butamine drug 5.0 ml, a total of 155 ml, was injected into the jugular vein. Control group animals remained for the experiment.

Table 1

Scheme of treatment of calves infected with trichophytosis

Groups	Number of heads	Methods of treatment					Treatment effectiveness
		Name of the drug	Injection method	The amount of the drug	Follow-up period, days	The cost of 1 calf, sum	
I experiment	4	LTF-130 vaccine + tetramag	Muscle	10,0 ml 5,0 ml	9-20	25000	100%
II experiment	4	Ivermectin + multivitamin	Under the skin	3-ml	20	11000	100%
			Muscle	5-ml			
III experiment	4	Fluconazole + butamine	blood vessel	150-ml - 5 ml	20	18000	100%
IV control	4	the drug is not used	-	-	30	-	

Results and their analysis. In the course of research, the diameter of the injured skin formation stopped expanding, and small hairs began to grow around it. At the end of the experiment, this part was covered with wool. From covered wool and skin, 5-6 hairs and 1 cm of skin products were taken to the laboratory for examination and checked for the presence of fungus.

Results: During the research, fungi were found at all stages of the development of the skin derivative before the experiment. In the animals of the first, second and third experimental groups, already on the 10th day, the signs of dermatitis were alleviated, itching was almost not felt. In 20 days, wounds disappear in experimental animals, the hairline is not tangled. tr. verrucosum was not found when the skin was scraped and microscopically examined on days 10-20 of the experimental group animals. The animals in the control group showed clinical signs of dermatitis in all periods of the study.

The scores increased slightly in the control group, but significantly higher than in the experimental group. The study of the distribution of fungi and age dynamics in cattle showed that in the autumn-winter period, young animals under one year of age are most often infected with trichophyta. The invasion of ectoparasites in the conditions of private households is not so clear.

Conclusion: Studies have shown that systemic drugs - ivermectin and multivitamin, LTF-130 vaccine and tetramac, fluconazole and butamine have a therapeutic effect on cattle trichophytosis at tested doses. A decrease in the number of erythrocytes and hemoglobin was found in the study of hematological parameters in trichophytosis of cattle, which may indicate a decrease in the supply of oxygen and nutrients to the tissues and organs of the animal body with dermatitis of parasitic etiology. In experimental animals, the rate of wool production in the skin derivative changes slightly after 9 days, and after 20 days they cover the skin. After 30 days, the animals will fully recover.



List of used literature

1. Дроздов А.И. Методы выделения антигенов из патогенных грибов.-Л: Медицина.- 1971,- 33 с.
2. Ежедневно, в утреннее и вечернее доение, от коров опытной и контрольной групп отбирали по 200 мл проб молока и проводили его исследования.
3. Ишкаева Д.Р., Юсупова ЛМ. Биологическая активность производных бензофураксана /Новые фармакологические средства в ветеринарии: Материалы научн.-практ. конф. СПб.: СПбГАВМ, 2002.- С. 57.
4. Jubb K. V. F, Kennedy P. C. Pathology of domestic animals, end, dit. by Acad. Press, New York, 2003, 697 p.
5. Лещенко В. М. Опыт лечения оникомикозов орунгалом методом пульс-терапии. Текст. / В. М. Лещенко, Г. М. Лещенко // Вестник дерматологии и венерологии. 1998. - №3. - С. 61 - 62.
6. Маланин Л.П., Морозов А.П., Селиванова А.С. Ветеринарные препараты. – М.: Агропромиздат,1988. – 278 с.
7. Маланин Л.П., Морозов А.П., Селиванова А.С. Ветеринарные препараты. – М.: Агропромиздат,1988. – 278 с.
8. Насынов Б.Б., Салимбаев А.А. Способ лечения трихофитии у телят // Сборник науч. тр. «Естествознание и гуманизм», том 6, № 1, 2010.
9. Поляков И.Д. Клиническое проявление дерматомикозов у собак и кошек / Материалы XII международного московского конгресса по болезням мелких домашних животных. М.: Ассоциация практикующих ветеринарных врачей.- 2004.- С. 100-101.
10. Усмонова, Х. (2023). Эффективность Ивермектина и поливитаминного препарата для лечения и профилактики трихофитоза крупного рогатого скота. *in Library, 1(2)*, 117-120.
11. Усмонова, Х. (2023). Использование монохлорированного йода для лечения трихофитии у крупного рогатого скота. *in Library, 1(2)*, 80-82.
12. Juraevna, U. K. (2023). The Effectiveness of Ivermectin and Multivitamin Preparation for the Treatment and Prevention of Cattle Trichophyton Disease.
13. Juraevna, U. K. (2023). Utilizing Monochlorinated Iodine as a Treatment for Trichophytosis in Cattle.
14. Jo‘Rayevna, U. X. (2023). QORAMOLLARDA LTF-130 VAKSINANI DOZALARDA QO ‘LLASH. *Science and innovation, 2(Special Issue 8)*, 846-850.
15. Усмонова, Х., Избасаров, У., Мамадуллаев, Г., & Рузиев, З. (2022). Современные требования к лечению дерматозов (псориаза, экземы) сложной этиологии, трихофитии у человека, овец и коз. *in Library, 22(2)*, 684-687.
16. Усмонова, Х. (2022). Причина и патогенез заболевания Трихофитом крс. *in Library, 22(2)*, 144-146.
17. Усмонова, Х. (2022). Способ лечения Трихофита крс препаратами Флуконазола и Бутасола-100. *in Library, 22(3)*, 28-30.
18. Усмонова, Х. (2022). Дозированное применение вакцины LTF-130 крс. *in Library, 22(4)*, 846-849.



19. Усмонова, Х., & Шопулатова, З. (2021). Изучение эпизоотологии трихофитиза у коров Самаркандская область. *in Library*, 21(3), 34-37.
20. Усмонова, Х. (2021). Экономический ущерб в результате трихофии в Узбекистане. *in Library*, 21(2), 26-28.
21. Усмонова, Х. (2021). Изучить эпизоотологический статус трихофитии крупного рогатого скота. Разведение в условиях Узбекистана. *in Library*, 21(4), 74-78.
22. Jahongirovna, S. Z., & Juraevna, U. K. (2021). Study of epizootology of trixophytis disease in cows of Samarkand region. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(9), 34-37.
23. Усмонова, Х. (2020). Совершенствование методов профилактики и лечения трихофита КРС. *in Library*, 20(3), 226-229.
24. Усмонова, Х., Сайдалиев, Д., & Рузикулов, Р. (2017). Значение, задачи и роль ветеринарно-санитарной науки в производстве. *in Library*, 17(3), 24-25.
25. Izbasarov, U. K., Mamadullaev, G. K., Ruziev, Z. E., & Usmonova, K. Z. Modern Requirements for the Treatment of Dermatoses (Psoriasis, Eczema) of Complex Etiology, Trichophytosis in Humans, Sheep and Goats.
26. Usmonova, H. J. Economic Damage as a Result of Trichophy in Uzbekistan. *JournalNX*, 7(07), 26-28.
27. Davlatov, R. B., & Khushnazarov, A. K. (2024). Diagnosis and chemoprophylaxis of rabbit eymeriosis. In *E3S Web of Conferences* (Vol. 480, p. 03020). EDP Sciences.
28. Khushnazarov, A. X. (2022). OBZOR LITERATURNYX DANNYX PO KHIMIOTERAPII I KHIMIOPROPHYLAKTIKI EYMEROZA KROLIKOV. *Journal of PEDAGOGS*, 23(2), 83-86.
29. Хушназаров, А. (2023). История и систематическое состояние изучения эмероза кроликов (обзор литературы). *in Library*, 1(2), 16-19.
30. Хушназаров, А. (2021). Эймериозная болезнь кроликов (на основе анализа литературы). *in Library*, 21(4), 24-25.
31. Хушназаров, А. (2021). Разработка требования к периоду разработки (анализ литературы). *in Library*, 21(2), 7-8.