

ETIOLOGY, CLINICAL SIGNS AND PREVENTIVE MEASURES OF SKIN PATHOLOGIES OF FARM ANIMALS

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Abstract

This article describes the causes of skin pathologies in farm animals, their clinical signs, diagnostic approaches, as well as treatment and preventive measures. Skin diseases significantly reduce animal productivity, cause economic losses, and in some cases possess zoonotic potential. Therefore, timely identification and effective control of these conditions are of great importance in veterinary practice.

Keywords: Skin pathology, dermatitis, dermatomycosis, anthrax, prophylaxis, farm animals.

Introduction

In the body of an animal, the skin, as the largest organ, performs many physiological functions. It protects the body from the external environment, provides heat exchange, participates in metabolism and plays an important role in the functioning of the immune system. Nevertheless, under the influence of various external and internal factors, pathological changes in the skin may occur. Skin diseases cause great harm not only to the overall health of the animal, but also to the farm economy.

Dermatomycosis diseases in cattle are one of the most pressing problems in veterinary medicine, the origin of which mainly due to the causative agent *Trichophyton verrucosum* has been proven in many studies. This disease is notable for its rapid spread among cattle, being contagious and causing serious damage to productivity.

In foreign sources (Chermette et al., 2008; Quinn et al., 2011; Moriello, 2014) and the epidemiology, specificity of clinical signs and methods of diagnosis of trichophytia in cattle are covered in depth. As scientists have emphasized, young cattle, especially calves, are most susceptible to the disease. The disease is more common in animals kept in the winter season, indoors and in humid conditions.

Conducted in the context of Uzbekistan for the period 2023-2025 [Usmonova.X.J. 1;11-12.]. The epizootology of trichophytosis and other dermatomycoses among cattle has been studied extensively. According to them, the disease spreads quickly when hygienic rules are not followed on livestock farms. Solutions of imaverol, grizeofulvin, iodine, as well as remedies based on traditional remedies (onions, Spanish seeds, garlic) gave excellent results.

International regulatory documents (OIE, 2021) note the need for strict adherence to quarantine rules, preventive vaccination of livestock and constant disinfection work in the prevention of dermatomycosis diseases in cattle.

The analysis of the literature shows that an integrated approach to the fight against dermatomycosis



in cattle is necessary: high efficiency can be achieved through diagnosis, treatment, disinfection, immunoprophylaxis, as well as improving hygienic conditions.

Etiology, clinical signs of skin pathologies in animals, consists of 5 main parts. 1. Etiology of skin pathologies. Many causes are involved in the occurrence of skin diseases: Infectious factors: bacterial (staphylococcus, streptococcus), fungal (trichophytosis, microscopically), viral (smallpox, papillomatosis) diseases. Parasitic factors: harm to the skin by ticks, mites, fleas and lice. Physicochemical factors: burns, frostbite, mechanical injuries, toxic substances. Metabolic factors: vitamin and mineral deficiencies, hormonal disorders, liver and kidney disorders.

Allergic reactions: sensitivity to certain medications, food, or environmental factors.

2. The most common skin disease is, Dermatitis – inflammation caused by various factors. Eczema is a chronic, accompanied by itching and exudation. Dermatomycosis (trichophytosis, mycosis) – fungal infections, usually of zoonotic nature. Itching (sarcoptosis, psoroptosis, demodicosis) – accompanied by thickening of the skin and hair loss as a result of mite bites. Papillomatosis is of viral origin, manifested by changes in the shape of the tumor.

3. Clinical signs. Skin pathologies are manifested in various forms, but the common symptoms include: itching and discomfort of the animal,

hair loss, partial or complete alopecia, redness, swelling, injury,

The crust, pus or dry spots are formed, in some cases, an increase in body temperature and aggravation of the general condition.

4. Ulcer diagnostics:

Clinical examination – examination of the animal, palpation.

Microscopic examination – the detection of parasites or fungal elements. Bacteriological methods - identifying the causative agent of a disease by sowing. Biopsy – histological study of skin changes. Allergic tests – to determine sensitivity.

5. Treatment and prophylaxis: Etiotropic treatment: antibiotics, antifungal drugs, acaricide drugs. Symptomatic treatment: antiseptic solutions, ointments, vitamin-mineral complexes. General measures: compliance with hygiene requirements, improvement of care, balancing of nutrition, strengthening immunity. Prevention: regular disinfection, disinsection and deratization, preventive processing against parasites, vaccination.

Conclusion:

Skin pathologies that meet in farm animals occur as a result of various factors, and their timely detection is important for farm productivity. The complex use of diagnostic, therapeutic and preventive measures not only keeps animals healthy, but also contributes to the prevention of zoonotic diseases that are dangerous to humans.

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