Utilizing Monochlorinated Iodine as a Treatment for Trichophytopsis in Cattle

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Annotation: Trichophyton disease caused by Trichophyton verrucozum has been common among livestock in recent years. Monochlorinated iodine preparation consists of 3% and 30% hydrogen chloride and is used for aerosol disinfection and inhalation purposes. This tool is used as an ointment in the treatment of cattle trichophytosis.

Keywords: Cattle, fungus, macro-micro element, monochlorinated iodine-levomekol, trichophytia.

Introduction: At the time of breeding and development of livestock in the population and private farms, dermatomycoses of animals found in livestock farms are important. In particular, trichophytosis is widespread in all regions of the Republic of Uzbekistan and causes great economic damage to farms.

Relevance of the topic. Trichophytosis is a common agricultural and human skin fungal disease, and is more common in winter and spring. The disease is chronic and fast multiplying infectious, it is common in beef cattle, lean dairy cows and young animals, and it is rare in cattle.

Proper and high-quality organization of the 1st feed base for agricultural livestock, creation of a quality feed base, including timely mowing of hay, protection of strong feeds from rodents.

2-Maintenance: clean and high-quality storage of agricultural animal barns, feeding at the end. Feeding of animals protected from dry moisture, (making the bottom of the cattle with bricks, wooden floors, floors made of natural agricultural products), storage of ends in biton or iron, wooden ends, i.e., urine and manure cleaning at time z. The walls of barns should be plastered and whitened with a mixture of copper cupra in mortar.

3. Lack of macro and microelements: macroelements calcium, sodium, potassium, iron, microelements - iodine, zinc, cobalt, magnesium and proteins with all vitamins and amino acids. These are of two types, 10 interchangeable amino acids and 10 non-exchangeable amino acids.

Object and methods of research: Scientific research work was conducted in Mughlan and Mirishkor villages of Kasbi district of Kashkadarya region in the season of 2023.

Cattle over 1 year old were selected for the experiment in order to study the effectiveness of monochlorinated iodine in cattle infected with infectious trichophytic fungi. The storage and feeding conditions of the cattle were analyzed, and the composition and nutritional content of their ration was organized. The incidence of trichophytic diseases in cattle was studied.

Analysis of research results: three groups of cattle infected with trichophytopsis, each with 3 heads over one year old, were selected for the experiment. In 3 head of cattle infected with fungus, iodine monochlorine 3% and hydrogen chloride 30% are applied to the external surface of the affected livestock once at a rate of 100 mg/kg. Groups 1-2 are the experimental group and group 3 is the control group.
Table 1. Effects of mixtures of monochlorinated iodine and levamisol ointment

<table>
<thead>
<tr>
<th>Group</th>
<th>Numbers</th>
<th>Preparations</th>
<th>Methods of treatment</th>
<th>Result of treatment</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>Monochlorinated iodine 3%, hydrogen chloride 30%</td>
<td>100 mg/kg</td>
<td>whitened</td>
<td>40% whitened</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Monochlorinated iodine Levamisol ointment</td>
<td>140 mg/kg 71%</td>
<td>whitened</td>
<td>treated 100%</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>No preparation utilised</td>
<td>Preparat qo‘lla-nilmadi</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

After that, the recommended 100 mg/kg for animals of group 1 and 140 mg/kg for animals of group 2 were applied once to the affected area with 71% \(\pm\) 29% external fungus. Animals of the 3rd group were not treated with the drug.

Figure 1-2. Animals infected with Trichophoton verrcosum fungal disease.

Conclusion: Monochlorinated iodine 100mg/kg is applied to the external surface once. It is observed that the animal develops black scabs within 20 days and sheds. If the nutritional micro-climatic conditions are based on the norm, the natural jungle will germinate. For the treatment of trichophytosis in cattle, when a mixture of iodine monochlorine 100mg/kg and levamisol ointment 40mg/kg is applied once to the external surface, the fungus will sprout within 10 days.

It shortens the duration of disease treatment and has a positive effect on the growth of agricultural livestock. Treatment of the disease with this ointment for the treatment of trichophytosis in cattle leads to a reduction in the recovery time of the wound site, and has a positive effect on the growth and development of livestock. Balanced diet and normalization of micro-climatic conditions in the livestock farm during the treatment process are important factors.

References


