Investigations on the Incidence of Pod Dermatitis in Sheep

Octavian Negrea[1], Vioara Mireşan[1], Camelia Răducu[1], Flore Chirilă[2], Iulia Feştilă[1], Zamfir Marchiş[1]

[1]*University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Animal Science and Biotechnologies, 400372-Cluj-Napoca, Manastur, 3-5, Romania*
[2]*University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Veterinary Medicine, 400372-Cluj-Napoca, Manastur, 3-5, Romania*

Abstract
Investigations carried out on a herd of 485 sheep (ovine adult and youth), a private unit of household type, regarding the incidence of pod dermatitis and the picture in dynamic of clinical anatomical changes in the period January-April 2011, highlights the increasing frequency of their 2.2% in January to 2.7% in February, 3.4% in March and 4.6 in April. Of all disease, are dominant lesions of pod dermatitis with necrobacilium (66.1%), followed by lesions of felon (15.9%), suppurative pod dermatitis (12.9%) and other causes (6.4%).

Keywords: pod affection, suppurative lesion, Turcana race, Tigaie race

1. Introduction

In sheep have often evolving enzootic pods diseases, causing large economic losses, both in the production of milk, meat and wool as well as negative influences on reproduction [1,2]. Occur throughout the year, but with greater frequency in rainy seasons. These disorders of the legs are caused by a pyogenic micro flora composed of streptococcus staphylococcus , Corynebacterium sp., Spherophorus necrophorus, etc.[3]. If there are some no hygienic shelters with wet bedding, moldy and dirty, paddocks and stables no hygienic by excess moisture, infiltration and maceration time favor box horn, the skin of the crown and the interdigital space, are opening gateways for pyogenic microflora that conduct to pods diseases [4,5].

2. Materials and methods

The researches on the incidence of pods diseases in sheep were conducted on a herd of 485 sheep (adult and youth) Tigaie and Turcan race, bred and maintained in traditional household system in an area sub-mountainous Transylvania (Cluj county). The study was conducted in dynamic, from January to April 2011. Sheeps are housed in makeshift shelters and when weather conditions allow access to the pastures of the surrounding area. Food support is hay, corn stalks and a concentrated mixture consisting of corn, wheat and barley.

It has been conducted a detailed anatomical and clinical study, the entire existing effective, the presence of lameness and lesion picture. Sheeps with pods diseases were individualized by marking in the case withers area and the cause was centralized monthly.

Also was monitored by clinical forms within the incidence of pods lesion evolution and assessing the following picture: necrobacilosys pods dermatitis, suppurative, and panaritium. Along with anatomical-clinical detection of disease forms established a therapeutic act, surgical and medical.

* Corresponding author: Octavian Negrea, Email: onegrea50@yahoo.com

3. Results and discussion

Data on pods disease incidence in dynamic period January-April 2011, on a flock of 485 sheep are presented in table 1.

The data in Table 1 shows an increase in dynamic of pods incidence in the group of sheep in the study, from 2.2% in January, from 2.7% in February, 3.6% and 4.6% in March in April.

The main causes of offending the increasing number of cases with severe pods as:

- Calves at night in a shelter improperly, with wet bedding, moldy and dirty.
- Lack of shelter drainage for excess moisture (water infiltration, urine, etc.)
- Water trough is located on soft ground, with more moisture.
- Decrease gradually from one to another, the quality of feed given to food [1,2,6,7].

Pods disease incidence in dynamic group of sheep in the study is presented in Figure1.

Pods disease frequency after anatomic-clinical form of evolution is presented in Table. 2.

Analyzing the data obtained, the incidence of pod disease in relation to anatomo-clinical form of evolution, there is a dominance of necrobacilosys 66.1%, 15.9% followed by, suppurative pod dermatitis 12.9% and 6.4% other causes.

Necrobacilosys presence in a high percentage compared with pathological forms evolving, highly infectious points to the etiological agent, the background, predisposing factors (excessive moisture, mud, undernourishment, inconsistency in the therapeutic act) [8,9,10].

The variation intensity of pods depending on anatomic and clinical picture of sheep in the study group is presented in fig. nr.2.

Table 1. The frequency of pods diseases in dynamic at sheep's (adult and youth)

Period	Sheep livestock	From whom:	
		Pods diseases	%
January	485	11	2.2
February	470	13	2.7
March	491	17	3.6
April	452	21	4.6

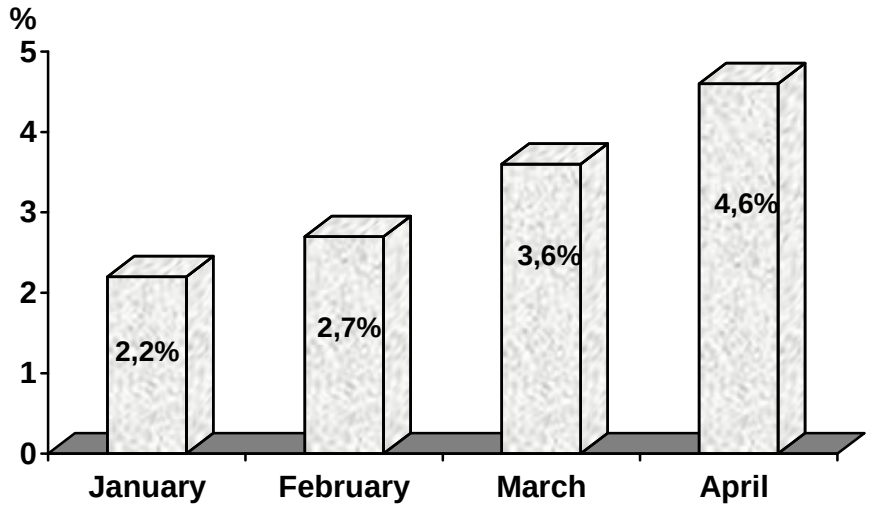

Figure 1. Dynamic of pods incidence in the group of sheep

Table 2. Pods disease incidence in sheep after clinical anatomical aspect

Period	Nr.of sheep with pods diseases	Din care							
		Necrobacilosys		Panaritium		Supurative pods dermatitis		Other causes	
		Nr.	%	Nr.	%	Nr.	%	Nr.	%
January	11	7	63.6	2	18.1	2	18.1	-	-
February	13	9	69.2	1	7.6	1	7.6	2	15.3
March	17	10	58.8	3	17.6	3	17.6	1	5.8
April	21	15	71.4	3	14.2	2	9.5	1	4.7
	62	61	66.1	9	15.9	8	12.9	4	6.6

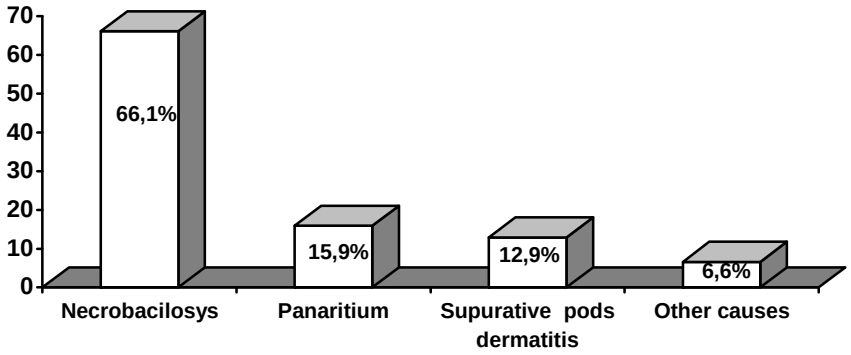

Figure 2. Variation intensity of pods of sheep

4. Conclusions

Research conducted during January-April 2011, on a flock of 485 sheep (adult and young sheep the previous year), the race Tigaie and Turcana from a private unit of household type, on the pod disease, reveals the following aspects:

1. Increased incidence and severity of Pod disease and anatomical and clinical picture is highly dependent on conditions of food and hygiene maintained effectively, especially in winter-spring season.
2. Pod disease, in the dynamic period under study, increasing progressively from January to April 2.2% 4.6%.
3. Of total existing pod disease anatomical clinical picture in terms of evolutionary necrobacilosys dominates 66.1%, followed by suppurative pod dermatitis 12.9% 15.9% and 6.6% other causes.

References

1. Dărăban, S.,– Creşterea Ovinelor, Editura Risoprint, Cluj-Napoca2006
2. Cteske, J., Predators. În Haskell SH., et al., Sheep care and management, Minneapolis, University of Minnesota. Extension service, 2002.
3. Negrea, O., Patologie Animală şi Tehnici Sanitar Veterinare, Editura AcademicPres, Cluj-Napoca, 2007.
4. Adameşteanu, I., Căpăţână, V., Urgenţe în medicina Veterinară, Editura Ceres Bucureşti, 1973.
5. Baba, A.I., Diagnostic necropsic veterinar. Editura Ceres Bucureşti, 1996.
6. Muste, A., Patologie si clinica chirurgicala veterinara speciala. Ed. AcademicPres, Cluj-Napoca, 2010
7. Radostitis, O.M., Gay, C.C., Blood, D.C., Hincheliff K. W., Veterinary Medicine, a textbook of the deseases of cattle, sheep, goath and horses. Ed. Sydney W. B. Saunders, 2000
8. Susan L.Fubini, Norm G. Ducharme, Farm animal surgery 509-533.Editura Saundres, U.S.A 2004.
9. Oană Liviu, A.Timen, Intervenţii chirurgicale la animale . Editura Mediamina. Cluj-Napoca, 2005
10. Nicolae Constantin, Tratatul de Medicină Veterinară, vol. V .Editura Tehnică Bucureşti, 2008