

from heel ulcer was 1.3 times of healthy cows or suffering from other injuries. Other injuries did not show any significant effect on culling.

**Conclusion and Clinical Relevance-** These findings indicate that primarily the heel ulcers should be detected and all factors affecting heel ulcers should be controlled to reduce the culling effect of heel ulcers.

Lameness is a clinical manifestation of a vast spectrum of diseases specified in a total of 43 causes and more than 80 potential hazards. It has been classified as the most important welfare problem in dairy cows. According to many reports, lameness takes the third place in causing economic loss to dairy farmers after infertility and mastitis. The economic loss associated with lameness incurred as a result of disease arises primarily from the consequences of disease and not the cost of treatment. Culling (exiting) is the departure of cows from the herd because of sale, slaughter, salvage, or death. The term "cull" refers to all cows that leave the dairy regardless of their destination or condition at departure.

**Key Words-** Lameness, Culling, Dairy cow, Chi-Square Test, Fischer exact test

#### References

1. Sulayeman M, Fromsa A. Lameness in Dairy Cattle: Prevalence, Risk Factors and Impact on Milk Production. *Global Veterinaria*. 2012;8(1):1-7.
2. Fetrow J, Nordlund KV, Norman HD. Invited Review: Culling: Nomenclature, Definitions, and Recommendations. *Journal of Dairy Science*. 2006;89(6):1896-905.

Oral Presentation

### Treatment of Chronic Mastitis in a Dairy Cow: A Case Report

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**Case Description-** A 4-years old crossbred cow, presented to Outdoor Hospital with a history of no milk letdown from udder even 7 days after parturition (in 3<sup>rd</sup> lactation).

**Clinical Findings-** After complete physical and clinical examination, it was concluded that animal was suffering from chronic mastitis and was unresponsive to medicinal treatment of 5-7 days.

**Treatment and Outcome-** After proper restraining of the animal, the fibrosed material in teat canal was crushed with teat bistoury and removed through hand milking process. To avoid further adhesion in the teat canal and for milking purpose, four plastic tubes made from I/V drip set having stoppers were passed through the teat canal. These tubes were fixed to teat with the help of suture material and adhesive tape. Finally, the animal was given intra-mammary tubes, parental antibiotics and NSAID.

Animal recovered as milk started coming out of teat canal and after 7 days these tubes were removed. It is concluded that this is very cheap and effective surgical method for the treatment of chronic mastitis in dairy animals.

**Clinical Relevance-** In many cases, mastitis in dairy animals due to unawareness about dry cow therapy is observed after parturition and similar observations were reported by Hillerton and Berry (2005). Intra-mammary tubes were given through the plastic tubes inserted in teat canals as reported by Rodastitis et al. (2007) that in mastitis both intra-mammary and parental routes gave better results.

**Key Words-** Mastitis, Dairy cow, Surgical treatment

#### References

1. Hillerton JE, BERRY EA. Treating mastitis in the cow—a tradition or an archaism. *J Appl Microbiol* 2005;98:1250-1255.
2. Rodastitis OM, Gay CC, Hinchcliff KW et al. *Veterinary medicine a text book of the disease of cattle, horses, sheep, pigs and goats*. 10th ed. Spain: Saunders Elsevier, 2007;673-762.

Oral Presentation

### Sole Ulcer as a Sign of Sub-acute Rumen Acidosis in a Simmental Dairy Herd Cows

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**Case Description-** A dairy herd of Simmental cattle received feeding of higher ratios of non-structural carbohydrates to forage with particle size of less than 20-mm and lameness. Dry matter intake was lower than predicted DMI for these breeds.

**Clinical Findings-** The clinical signs included a mild diarrhea, a moderately distended and doughy rumen, a reduction in feed intake, milk fat depression and sub solar hemorrhages, sole ulcer and laminitic claw changes.

**Treatment and Outcome-** NDF, Forage NDF, physically effective NDF (peNDF; calculated as >19 mm) and effective NDF (eNDF) was adjusted to 32 % DM, 73.5 % NDF, 24 % DM and 26 % DM respectively.

Also, localized conservative treatment of the sole ulcers was performed.

**Clinical Relevance-** A tentative diagnosis of sub-acute rumen acidosis is usually confirmed by the herd response to corrective nutrition.

**Key Words-** Physically effective NDF, Effective NDF, Sub-acute Rumen acidosis, Sole ulcer

#### References

1. Greenough PR, Bovine laminitis and lameness: a hands-on approach / Edinburgh; New York: Saunders/Elsevier, 2007, 36-69.
2. Amstel S, & Shearer J, Manual for treatment and control of lameness in cattle, Blackwell, 2007, 31-41, 127-140.

Oral Presentation

### Ultrasonographic, Laparoscopic and Surgical Findings in Cow with Omental Bursitis: Case Report

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**Case Description-** A cow with loss of appetite and abnormal distension of the abdomen

**Clinical Findings-** The main clinical findings were abnormal distension of the abdomen as the most important clinical symptom. The owner complained of the fact that the cow showed loss of appetite and abnormal distension of the abdomen. The most important finding on clinical examination was made on rectal exploration in which a large sac filled with fluid was felt in the left and right side in the abdomen. In the right side the large sac correspond with dilated abomasum.

The purpose of this report is to describe unusual case of abdominal distention due to inflammation of the omental bursa.

This diagnosis was verified by laparoscopic, ultrasonographic and surgery studies.

**Treatment and Outcome-** Left and right flank exploratory laparoscopy was performed. A large mass was seen in laparoscopy exploratory laparotomy showed that, this was an inflamed omental bursa containing a large quantity of serofibrinous exudate, about 30 L of fluid were within the cavity.

Ultrasonography help us to localize the lesion to make surgical drainage. The clinical diagnosis is difficult and is usually based on exploratory laparotomy, laparoscopy and ultrasonography. Treatment consists of drainage of omental bursa.

**Clinical Relevance-** This case report describes the clinical, ultrasonographic, laparoscopic and surgical findings in a Holstein cow with omental bursitis.

This is an interesting case to use ultrasonography and laparoscopy to confirm omental bursitis.

#### References

1. Grymer J, Johnson R: Two cases of bovine omentobursitis, *J Am Vet Med Assoc* 181:714-715, 1982.
2. Thomas J. Divers, 2008 *Rebhun's Disease of Dairy Cattle*, second edition, p 196.
3. Blood, D.C. 2007 *Veterinary Medicine*, tenth edition, p 375.

Poster Presentation

### The Effect of *Mycobacterium Avium Paratuberculosis* Infection on Digital Diseases Occurrence in Dairy Herds

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**Objective-** *Mycobacterium avium paratuberculosis* infection or Johne's disease is a chronic progressive infection of ruminants. Clinical form of the disease is characterized by chronic diarrhea, emaciation, weakness and death. The subclinical form of disease is characterized by progressive weight loss, reduced milk production and early elimination of infected animal. This study was designed to evaluate the effect of *Mycobacterium avium paratuberculosis* infection on lameness, sole ulcer, white line disease and phlegmon in an industrial dairy farm.

**Design-** The case-control study to identify *Mycobacterium avium paratuberculosis* infection.

**Animals-** 1700 dairy cattle

**Procedures-** ELISA test (ID. VET co., France) was used. All data about previous and current lactation periods of 1700 dairy cattle was recorded between 2010-2013. These data were analyzed by SAS version 9.2. Chi-square test, used for analyzing the data. A *P* value  $\leq 0.05$  were considered significant.

**Results-** In this study the effect of *Mycobacterium avium paratuberculosis* infection on lameness (12.74% positive cows, 24.70% negative cows) and white line disease (2.31% positive cows, 4.07% negative cows) was significant. But it was not significant on sole ulcer and.