Summary

A 250 cow holstein herd experienced clinical mastitis in 50% of their first calf heifers at parturition. At the same time the bulk tank leucocyte count elevated to 540,000 from a usual 250,000. Cultures reveal *C. pyogenes* in the heifers, and *S. aureus* in the lactating herd. The heifers were successfully treated before freshening with a dry cow benzathine cloxacillin product. The staph problem was traced to inadequate flushing action in a home made backflush system. Various strategies for Staph control are discussed.

References

1. Bushnell, R.B.; Brazil, L.; Jasper, D.L. "Mechanization of Hygenic Practices" International Symposium on Machine Milking Louisville, Ky. Feb. 21, 1978 pp 400-411. 2. Bushnell, R.B. "Practical Hygienic Control of Milk Contamination and Udder Infections." Proceedings 23rd Annual Meeting of National Mastitis Council 1984 pp 31-42. 3. Cummins, K.A.; McKasky, T.A. "Effect of Sequential Benzathine Cloxacillin Infusions During the Dry Period." J. Dairy Sci. 1985 68:Supplement 1 p 206. 4. Eberhart, R.J.; Gilmore, H.C.; Hutchinson, L.J.; Spencer, S.B. "Somatic Cell Counts in DHI Samples". Proceedings 18th Annual Meeting of National Mastitis Council 1979 pp 32-39. 5. Glore, R.P. "Upholstered Freestalls as an Aid in Klebsiella Mastitis Control" Proceedings AABP 1985 pg 157. 6. Harmon, R.J.; Hogan, J.S. "Efficacy of an Automated Iodine Backflushing

System in Prevention of Intramammary Infection". Proceedings 23rd Annual Meeting of National Mastitis Council 1984 pp 43-50. 7. McDermot, M.P.; Erb, H.N.; Natzke, R.P.; Barnes, F.D.; Bray, D. "Cost Benefit Analysis of Lactation Therapy with Somatic Cell Counts As Indication For Treatment.". J. Dairy Sci. 1983 66:1198-1203. 8. McDonald, J.S. College of Veterinary Medicine, Washington State University, Pullman, Wa. 99164. Personal Communication. 9. Reneau, J.K. "Using DHI Somatic Cell Counts" Proceedings of 24th Annual Meeting of National Mastitis Council 1985 pp. 73-84. 10. Schnieder, R.; Jasper, D.E.; Eide, R.N. "The Relationship Between Bulk Tank Microscopic Cell Counts And The Individual California Mastitis Test Reactions." Standards of Performance for Mastitis Control Programs. Dairy Equipment Co. Madison, Wisconsin 53708. 11. Schultze, W.D. "Control of New Intramammary Infection at Calving by Prepartum Teat Dipping." J. Dairy Sci. 1985 68: pp 2094-2099. 12. Shearer, J.K.; Smith, K.L.; Bray, D.R.; Tran, T.Q. "Field Observations on the Effectiveness of Various Teat Cup Cluster Sanitation Procedures in Florida Dairies." J. Dairy Sci. 1985 68: Supplement 1 p 199. 13. Smith, K.L.; Schoenberger, P.S. Todhunter, D.A. "Efficacy of Antibiotic Therapy Administered During Lactation for Intramammary Infections Caused By Environmental Pathogens." J. Dairy Sci. 1986 69: Supplement 1 p 199. 14. Smith, T.W.; Eberhart, R.J.; Spencer, S.B.; Kesler, E.M.; Hargrove, G.L.; Wilson, R.W.; Heald, C.W.; "Effect of Backflushing on Number of New Intramammary Infections, Bacteria on Teatcup Liners, and Milk Iodine. J. Dairy Sci. 1986 68: pp 424-432. 15. Smith, W.T. "Effects of an Iodophor Backflushing System on New Intramammary Infections." Proceedings 23rd Annual Meeting of National Mastitis Council 1984 pp 51-62.

Abstracts

Sero-epidemiological survey of *Dictyocaulus viviparus* **infections in first-season grazing calves in The Netherlands**

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A sero-epidemiological survey of Dictyocaulus viviparus infections in calves was carried out using an enzyme-linked immunosorbent assay. Infection level with D viviparus was correlated with farm, herd and management characteristics. At least 75 per cent of the herds were infected with D viviparus. Calves on zero-grazing farms were infected at a lower level than calves grazing pasture. No regional differences in infection rate were observed. On 15 per cent of the farms calves had clinical husk while 51 per cent of farms had experienced husk in the past. A higher level of infection was seen when calves were housed later in the autumn. The number of calves grazing together and the stocking rate had a significant positive influence on the level of infection. No significant difference in the occurrence of clinical husk was observed between calves vaccinated against lungworm disease and calves not vaccinated against the disease.

Effect of halothane on bronchial calibre of anaesthetised cattle

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A computer-aided forced oscillation technique was used to examine the effects of halothane on bronchial calibre in three adult cows after anaesthesia had been induced with xylazine and thiopentone. The administration of halothane failed to produce bronchodilatation, possibly owing to low resting bronchomotor tone in the animals. However, an increase in expiratory reserve volume, associated with a small fall in airway resistance, was observed, suggesting that changes in elastic recoil may make a significant contribution to changes in airway resistance during anaesthesia. The results also emphasise the importance of relating airway resistance to lung volume.

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