Field epidemiological surveillance and treatment of foot rot in cattle

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Abstract
In three years one hundred cases of cattle presented with history of limping were taken in this study. 72% cases showed lesions of foot rot and was confirmed the same by gram staining smears obtained from the lesions. Foot rot was treated with sulfadiazine-trimethoprim 2400 to 3600 mg intramuscularly for three days along with 5% formalin foot bath for 10-20 days. Advised to drizzle the remaining foot bath solution throughout the cattle shed. Recovery rate was 95%. The formalin drizzled farms showed no further occurrence of foot rot in any cattle.

Keywords: Cattle, foot rot, sulfadiazine-trimethoprim, formalin.

1. Introduction
Following injury or abrasion of interdigital space, secondary bacterial infection by *Fusobacterium necrophorum* alone, or in combination with *Bacteroides melaninogenicus* often progresses to foot rot. The lesions tend to be especially severe and successful treatment particularly challenging. (Jan Shearer et al., 2005) [1].

2. Materials and Methods
Hundred cattle (79 cows and 21 bullocks), aged from 2 to 6 years, were presented with history of limping, shaking one or more limbs, reluctance to walk long and sternal recumbency in a few cases. Thorough washing of foot and clinical examination of 72 cases (58 cows and 14 bullocks) revealed foul smelling exudate, erythematous lesions in coronet, erosion of sole and pitting of heel bulbs, suggestive of foot rot. Random smears collected from margin of the foot lesions in 32 cases and gram staining confirmed *Fusobacterium necrophorum*, gram negative, long filamentous rods without branching.

All cattle were treated with sulfadiazine-trimethoprim (Bactrisol-Zoetis) 2400 to 3600 mg intramuscularly for three days. Advised daily once foot bath with 5% formalin (Formaldehyde-S.M pharmaceuticals) for 10-20 minutes and to sprinkle the remaining foot bath solution in cattle shed floor. Parenteral antibiotics or sulphonamides plus topical treatment of interdigital lesion have long been the preferred methods of treatment (Jan Shearer loc cit) [1]. Foot bathing is a more practical approach to cure as well as to control the spread of infection (Radostits et al., 2006) [2].

3. Conclusion
From this study, 95% cases recovered. The formalin sprinkled farms showed no further occurrence of foot rot in any cattle for more than 5 years.

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5. Reference