

Post-mortem rumen mucosa lung and liver alterations in intensively finished beef cattle

M. Brščić, L. Magrin, I. Lora, G. Cozzi, F. Gottardo

Department of Animal Medicine, Production and Health - University of Padua, Italy

AIMS - to assess post-mortem prevalence of rumen, lung, and liver alterations of intensively finished beef cattle at slaughter as a welfare monitoring tool and to study their variation among breeds and sex

METHODS

2 trained veterinarians inspected 15 cattle/batch and recorded

- **rumens** with hyperkeratosis, redness of mucosa, parasitosis, signs of ruminitis, star scar, plaque, ulcer, and adherence on rumen wall
- **lungs** with signs of pneumonia, fibrin filaments, and signs of pleuritis
- **livers** with signs of steatosis, parasitosis, and abscess or adherence

RESULTS

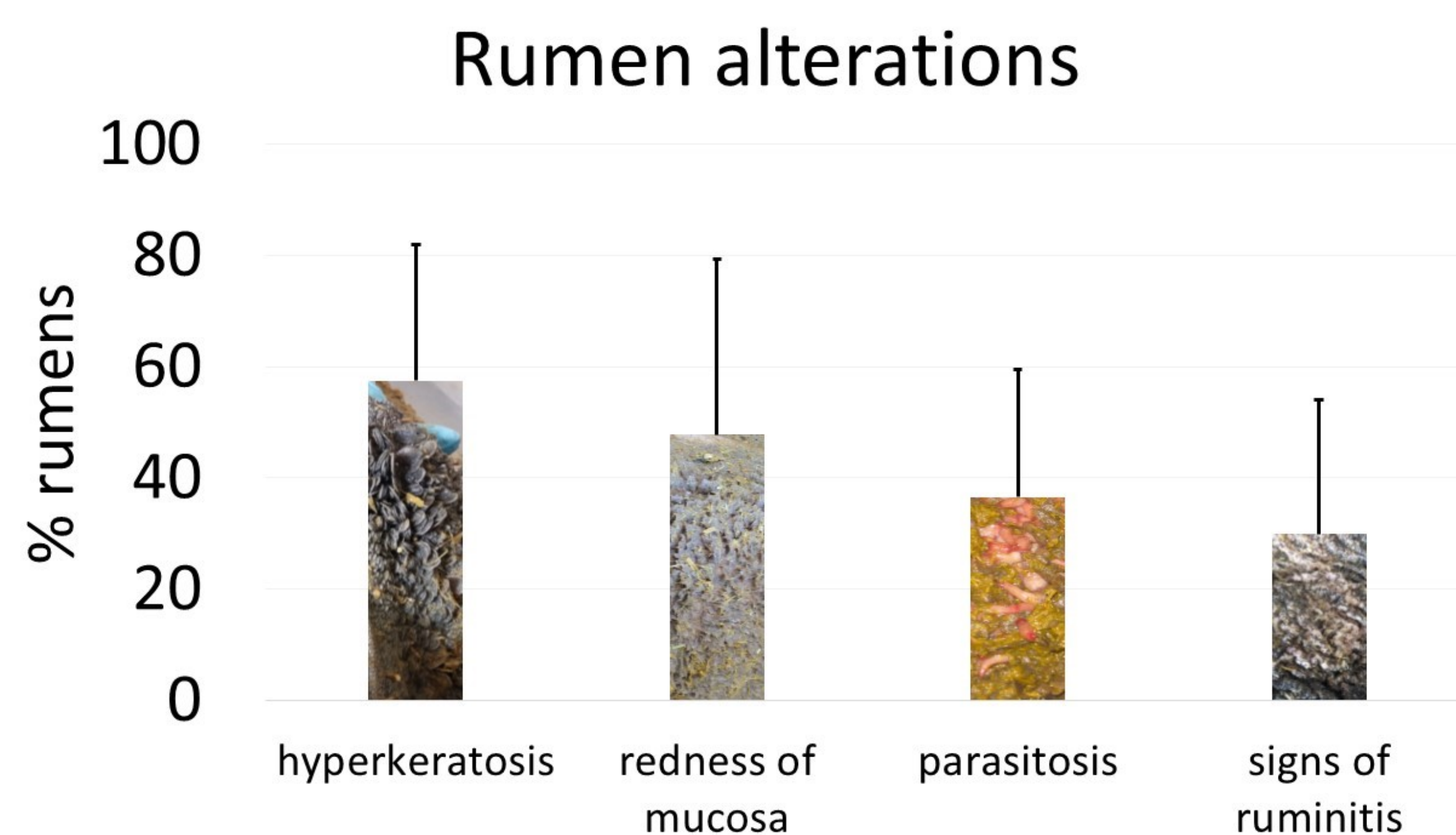


Fig. 1. Percentage (mean and SD) at batch level of rumen alterations recorded on 2161 animals belonging to 153 batches (97 bulls, 56 heifers) during 30 slaughter days

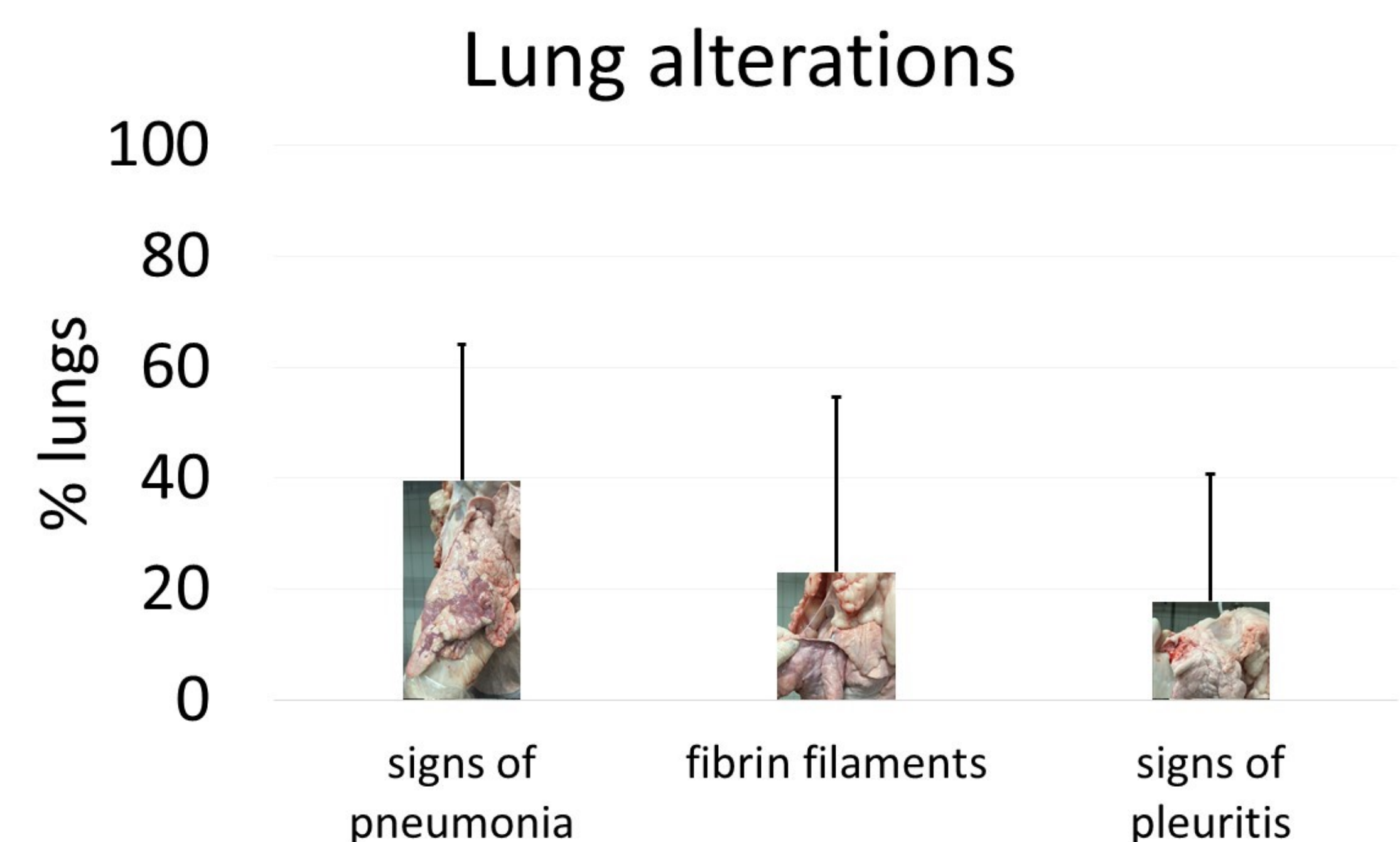


Fig. 2. Percentage at batch level of lung alterations recorded on the same animals

- **> 80% of batches** had no rumens with star scar, plaque, ulcer, and adherence on rumen wall, no lungs with severe pneumonia, and no livers with alterations
- **breed** affected % of rumens with parasitosis
the lowest for Italian, the highest for imported French beef cattle breeds
- **bulls** had greater % of lungs with signs of pleuritis compared to **heifers**

take-home message

This overview of alterations on rumens, lungs, and livers of beef cattle regularly planned for slaughter and the wide variability observed for given alterations point out criticisms and needs for investigation of potential predisposing factors related to management quality and feeding systems in some farms