Judgement criteria variation during meat inspection of slaughtered finishing pigs - Importance in the quality of collected condemnation data

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Background

Meat inspection (MI) is essential to verify compliance with legal requirements related to human and animal health, as well as animal welfare protection. During MI, in case of a gross pathological finding, official veterinarians (OV) need to apply a judgement criterion to decide if meat is unfit for human consumption, resulting in important and useful condemnation data. However, although the European Meat Inspection Regulation (EU) Nº 2019/627 sets out judgement criteria, most are generic, favouring flexibility and subjectivity. Therefore, condemnation data, which is important for livestock farmers, surveillance, and for benchmarking purpose, could be affected.

Materials and Methods

This work is part of a questionnaire study by COST Action 18105 (RIBMINS), aiming to collect information on how PMI of finishing pigs is currently performed in Europe.
In order to determine the extent of variation in total condemnation (TC) criteria applied during post-mortem inspection (PMI) of finishing pigs, an online survey using an in-depth questionnaire was prepared using SurveyHero® (enuvoGmbH, Zurich, Switzerland), aiming to collect this information from several European countries. The focus was on TC criteria regarding the following PMI findings: abscesses, arthritis, cachexia, erysipelas, icterus, *Mycobacterium*-like lesions, osteomyelitis, peritonitis, pleuritis, and pneumonia. These 10 PMI findings were selected based on internal discussions of RIBMINS members, representing Denmark, Finland, Germany, Italy, Norway, Portugal and Spain, who each provided information about the condemnation causes reported in 2019 in their country.

Results

From September to November 2020, 44 completed questionnaires were obtained from 26 European countries. The results showed a substantial variation in applied TC criteria between the participating countries. One of the main reasons for the variability in respondents' answers was due to the indicators used to define a generalised condition related to the ten PMI findings addressed. The TC criterion "only in cases of generalised disease" (OGD) was used more often by the respondents than the criterion "in all cases" (AC) (72.7% versus 27.3%) (Table 2), which stresses the importance of achieving consensus about the definition of a "generalised condition" macroscopically detectable during PMI of finishing pigs. The greatest variability in the use of these two criteria was found for erysipelas and icterus cases. More detailed examples will be given throughout the presentation.
This fact makes harmonisation a challenge and avoids drawing conclusions when comparing condemnation causes between abattoirs. This implies that it would be useful to investigate how a generalised condition can be identified and described and how it should be judged.

Conclusions

To our knowledge, this is the first attempt to characterise, at European level, differences in the TC criteria used for a relevant set of post-mortem findings in slaughter pigs.
Diverse practical instructions regarding judgement of TC are operative in different European countries. The results should be used as inspiration towards possible harmonisation, improving decision-making, and permitting comparative analysis between different reports to allow trend analyses and benchmarking. Further studies should be carried out to clarify and define the basis for the evidence-based TC of pig carcasses affected by PMI findings detected at slaughter.