PREVALENCE AND RISK FACTORS FOR OESOPHAGO-GASTRIC ULCERS IN AUSTRALIAN PIGS

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Introduction

Abattoir surveys have demonstrated that oesophago-gastric ulceration (OGU) is a common occurrence in pigs throughout the world. Australia is not an exception, with prevalences between 4.7% and 25% having been recorded in previous surveys. The Australian surveys were limited to certain regions and restricted to a small number of farms. (1). Various factors have been linked with risk of OGU development, but the pathophysiology of this morbidity is still unclear (2).

The objective of this study was to determine the prevalence of OGU in herds from different regions of Australia and investigate its relationship with factors which previously have been identified in the literature as conferring risk (2).

Materials and Methods

Stomachs from 10,912 pigs from 68 herds from Western Australia (WA), New South Wales (NSW) and Queensland (QLD) were examined for the presence of ulcers in the abattoir. Stomach were examined within 60 minutes of exsanguination. They were cut along the greater curvature, inverted and washed in running water and the following score system was applied: 0 – normal; 1 – hyperkeratotic; 2 – eroded; 3 – ulcerated; or strictures.

Each herd was examined on at least two distinct occasions and had a minimum of 40 stomach scored. Data from The Australian Pig Health Monitoring Scheme (APHMS) were also examined for those WA herds that were inspected within a month from stomach scoring.

A questionnaire then was sent to the owners/managers of all herds that were inspected, requesting information on a variety of management and other factors previously linked with altered risk of developing OGU.

Results

A summary of overall findings in the abattoirs is presented in the tables. Table 1 presents individual scores, whilst Table 2 compares the greater prevalence of advanced lesions in WA herds compared to QLD herds was not explained, and requires further investigation to identify the causes.

Correlations between OGU and lung conditions have been reported (3). This correlation also was found in the WA herd. It is not possible to determine if ulcers were the cause or the consequence of these pulmonary conditions. Given the strong correlation between strictures and lung score it can be assumed that the scar resulting from ulcercations may have a major role either causing or complicating lung conditions by restricting feed intake and therefore adding to the economical losses. Herds with mange and liver spots were less affected by ulcers, presumably mainly because these were outdoors herds where other risk factors were absent.

The correlation between ulcers and pelleted diets and unrestricted feeding were in agreement with previous studies (4,5), but not every herd that adopted either or both feeding systems were affected.

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References


