PREVALENCE OF GASTRIC LESIONS IN WESTERN AUSTRALIAN PIG HERDS: AN ABATTOIR SURVEY

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Oesophagogastric ulceration (OGU) occurs commonly with prevalences at slaughter of between 1% and 50% (Palomo et al., 1996), and is one of the most important causes of death in grower pigs (Love, 1981; Driesen et al., 1987; Fogarty et al., 1992). Abattoir surveys in Australia have found between 4.7% and 25% of pigs to have ulcers (Driesen et al., 1987). The objective of this study was to determine the prevalence of OGU in pigs from Western Australia (WA) at a commercial abattoir. The hypothesis tested was that the prevalence of lesions would be similar to those reported in other Australian states.

Stomachs from 2232 pigs from 18 herds were examined with at least 40 stomachs included from each herd. These were cut along the greater curvature, washed, inverted, and examined within 30 minutes of exsanguination. There were no changes to the routine abattoir operation during this survey and pigs were held in lairage for 2 to 24 hours. Stomachs were scored as: 0 - normal; 1 - hyperkeratotic; 2 - eroded; or 3 - ulcerated (Christensen and Cullinane, 1990). Pigs were classified as porkers (head-off dressed weight <54.5 kg) or baconers (>54.5 kg). Comparisons between groups were analysed using the $\chi^2$ test for independence.

The prevalence of OGU (Score 3) was 23.1% (range 0 - 75% in individual herds) (Table 1). When advanced lesions (score 2) were included the overall prevalence increased to 32.8% (range of herd prevalences of 0% to 82.7%). The prevalence of normal stomachs was 30.1%. No specific gender effects were found amongst a sample of 127 stomachs from 4 farms, both overall and for individual herds.

Advanced lesions (score 2 and 3) were significantly more common in porkers (47.5%) than in baconers (21%) ($P<0.0001$). In the single herd where both classes of pigs were examined the prevalence in porkers was also significantly higher than in baconers (71.4% and 29.2% respectively).

Table 1. Overall prevalence (%) and range of herd prevalences of oesophagogastric lesions in porkers and baconers at slaughter.

<table>
<thead>
<tr>
<th>Score</th>
<th>Porkers (n=854)</th>
<th>Baconers (n=1378)</th>
<th>Total (n=2232)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>22.8 (2.5-88.2)</td>
<td>32.2 (0.8-98.5)</td>
<td>30.1 (0.8-98.5)</td>
</tr>
<tr>
<td>1</td>
<td>29.4 (8.8-77.5)</td>
<td>46.8 (0-73.4)</td>
<td>42.2 (0-77.5)</td>
</tr>
<tr>
<td>2</td>
<td>11.4 (1.5-21.6)</td>
<td>7.7 (0-26.9)</td>
<td>9.7 (0-26.9)</td>
</tr>
<tr>
<td>3</td>
<td>36.1 (1.5-75.0)</td>
<td>13.3 (0-48)</td>
<td>23.1 (0-75)</td>
</tr>
</tbody>
</table>

As in other Australian states, gastric lesions were common in pigs in WA at slaughter. The prevalence of OGU in individual herds varied widely, so caution needs to be exercised when comparing this to other studies. An epidemiological survey is being carried out to identify risk and protective factors that may play a role in the development of OGU, including time off-food before slaughter. The impact of this condition on the pig productivity is also being evaluated.

References