Contrôle de l'involution utérine au moyen de l'échographie transabdominale en mode B : validation de la technique

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The use of trans-abdominal B-mode ultrasonography to assess uterine involution in sows: validation of the technique

The present study was performed on 14 cull sows. The day before slaughter, a trans-abdominal B-mode ultrasonography was performed to measure three uterine parameters: the maximum uterine height, the diameter of the uterine horns and the presence of intra-luminal uterine fluid. After slaughtering, uterine volume, uterine weight, and the length and width of horns were measured. The objective was to validate ultrasonography as a technique to assess uterine involution by comparing post-mortem measures and live animal ultrasonography measures recorded on-farm. The maximum uterine height $(8.3 \pm 1.3 \text{ cm})$ was positively correlated with uterine weight $(1552 \pm 756 \text{ g})$, uterine volume $(1564 \pm 739 \text{ ml})$, and length of horns $(127 \pm 33 \text{ cm})$ and width of horns $(4.0 \pm 1.2 \text{ cm})$ (p<0.05). The diameter of the uterine horns $(1.6 \pm 0.7 \text{ cm})$ was positively correlated with uterine weight and width of horns (p<0.01) and with uterine volume (p<0.05). The presence of intra-luminal uterine fluid was positively correlated with length of horns (p<0.01). These results, though performed on a small number of animals (n=14), suggest that ultrasonography may be a useful technique in assessing uterine involution in sows.