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Duration of confinement and pen-type affect health-related measures of welfare in lactating sows

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Abstract

Temporary crating is considered as a step towards improved welfare in lactating sows. Therefore, the aim of this study was to investigate effects of confinement period (CP) and farrowing pen-type (PT) on health-related measures. Four hundred and thirteen sows were kept in five PT with four CP each: CP 0-sows were not confined; CP 3-sows were crated postpartum for three days; CP 4- and CP 6-sows were crated from a day prior to expected farrowing until day 4 and 6 postpartum, respectively. Alterations in different body regions were recorded when sows were moved to the pens and in weeks 1, 3 and 4 postpartum. CP 6-sows displayed significantly more lesions on their back than CP 0- and CP 3-sows. Odds ratios of teat lesions were markedly higher in CP 4-sows than in all other CP. Pen-type P (Pro Dromi) resulted in more neck/back/body side injuries, claw horn changes and lame sows compared to all other PT. High odds ratios were also found for neck injuries in PT K (Knick), shoulder sores in PT K and T (Trapez), injured teats in PT F (Flügel) and body side injuries in PT S (SWAP). The types of lesions found in the present study are similar to those reported for crates caused by pen structures. While an overall assessment of pig (*Sus scrofa domestica*) production husbandry systems must also take piglet welfare into account, this study showed that keeping confinement periods as short as possible improves sow welfare and systems should be adapted to also cater for the needs of sows.

Keywords: animal welfare, farrowing systems, pathological alterations, skin lesions, *Sus scrofa domestica*, temporary crating