



REPRODUCTION

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EVALUATION OF REPRODUCTIVE PERFORMANCE OF FIXED TIME ARTIFICIAL INSEMINATION VERSUS CONVENTIONAL MULTIPLE INSEMINATION PROTOCOL IN IBERIAN GILTS

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Introduction

The aim of this study was to compare the efficacy of a FTAI program using Buserelin $4\mu g/ml$ (Porceptal®, MSD Animal Health) and conventionally based estrous insemination on reproductive performance in commercial Iberian gilts during favorable season.

Material and Methods

Sixteen nuliparous gilts (Iberian x Duroc breed, located in a commercial farm in Badajoz, Spain) were included in the study and were randomly assigned to Control (CG, n=8) and Proceptal group (PG, n=8). Gilts were treated with 20 mg of altrenogest [5 ml of Regumate® oral solution (0.4%)] from D-18 to D1. In CG, estrus was reviewed once a day from D4 until heat onset and two AI were done at 4 and 24h after estrous detection. PG were treated with 2.5ml of Porceptal® (i.m. $10\mu g$ buserelin) $131\pm3h$ after D0, and were FTAI 30-33h later. Females with estrous behavior before FTAI or not showing estrus at insemination were identified and excluded from the study. Pregnancy rate, gestation length, and farrowing data were recorded.

Results

Pregnancy rates were not different between groups (CG: 100% vs PG: 100%) (p >0.05). Gestation length of P dams was almost 2 days lower than in C ones (111.0 \pm 0.18 d vs 112.8 \pm 0.16 d, respectively, p <0.001). Both CG and PG had the same farrowing rate (100%). Total born was 6.1 \pm 0.57 (CG) vs 6.8 \pm 0.55 (PG), while stillborns trended lower in PG compared to CG (0.1 \pm 0.08 vs 0.5 \pm 0.22; p<0.1).

Conclusions

Although pregnancy rates or farrowing rates were not different between groups, gestation length was shorter in Porceptal® than control gilts. Total number of piglets delivered was also not different between groups, but Porceptal® gilts tended to have lower number of stillborn piglets than control gilts.