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Raising entire males is considered as one of the alternatives to the surgical castration without anaesthesia. Slaughter weights are usually lower in countries that already produce such animals (Spain, UK) and there is a lack of information regarding animal welfare for entire males that may be slaughtered later (115 kg live weight). Therefore, the welfare of entire males and females was assessed on farms from two countries that differ by their type of production: Spain and France.

## MATERIALS AND METHODS

France	Spain
6 farms	3 farms
F1 - F6	F7 - F9
60 entire males / batch	All entire males
M / F / M+F (+C) pens 6-30 pigs / pen	M pens / F pens 4-16 pigs / pen
Age : 136 - 150 d	Age : 128 - 137 d

No change in management

1 visit / farm



### Measurements

Social and exploratory behaviour, wounds on the body, tail biting, lameness and pressure injuries based on the Welfare Quality<sup>®</sup> protocols Mounting (M) and attempts to mount (T) by focal sampling during 5 minutes per pen at the beginning of the assessment

## RESULTS

### Mounting behaviour

- 565 females: 5 T and 2 M
- 561 males: 95 T and 21 M
- High variability between farms (Fig 1)
- A limited number of males involved in those behaviours
- Sexual behaviour tends to be more frequent in single sex pens (Mann Whitney stat, NS)

### Other behaviours

- Females are more active than males (66.4% vs 58%,  $p < 0.05$ ) and perform more pen directed investigation (21% vs 15.2%,  $p < 0.05$ )
- Social behaviour is more frequent in males than in females (5.9% vs 4.9%, NS)

Fig 1 : Mounting behaviour among entire males across farms according to the farms (F) and the type of pens

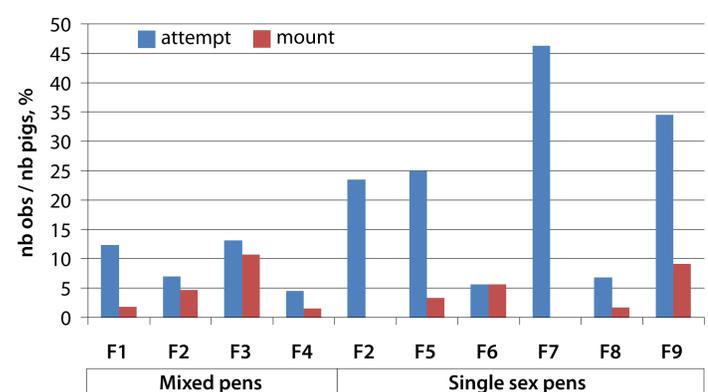
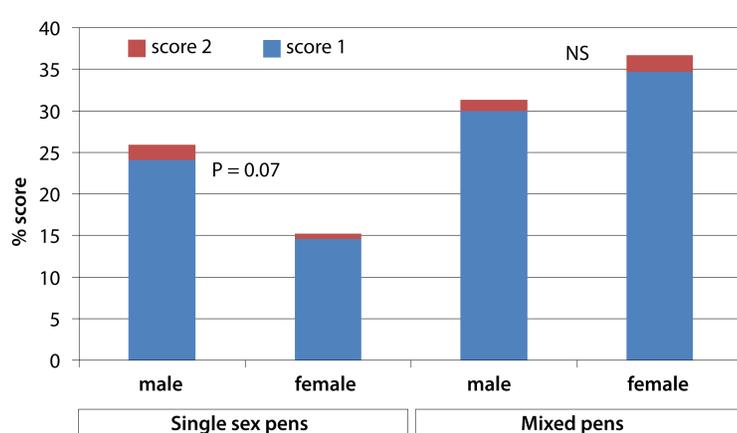


Fig 2 : frequency of score 1 (mild wounds) and score 2 (severe wounds) by gender and type of pen (CMH Chi-square)



### Pressure injuries

- There is a tendency to observe less bursitis in male pigs than in females housed in single sex pens but no significant difference between genders was observed in mixed pens

### Wounds on the body

- Low level of injuries
- Lesions scores are higher when pigs are mixed but in those pens there is no difference between genders (Fig 2)
- In single sex pens, females are less injured than entire male pigs ( $p = 0.07$ )

### Other

- Tail with lesions: 5.2% males and 2.8% females (NS)
- Lameness (mild to severe): 1.8% males and 1.3% females (NS)

## Conclusion

The frequency of mounting behaviour was low and varied dramatically from one farm to another. The highest occurrences of this behaviour were in general due to many attempts from a limited number of males. This behaviour induced a disturbance in the pen and could have induced more lesions on females when they were mixed with males, although no differences between genders were found in mixed pens.

Farmers concluded that raising entire males up to this age did not result in more problems than those they usually meet with castrated males. Even though the survey was made in the finishing period, complementary observations should be held at a latter stage, just before leaving to the slaughterhouse.