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COMPARISON OF SKIN INJURIES IN PIGLETS DURING CASTRATION IN THE FIRST WEEK OF LIFE

I. Hennig-Pauka¹, P.D. Tassis², I. Böhne³, E. Große eilage¹.

¹ Field Station for Epidemiology, University of Veterinary Medicine Hannover, Foundation, Hannover, Germany; ² Clinic of Farm Animals, School of Veterinary Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece; ³ Praxis Böhne, Melle, Germany.

Introduction

Surgical castration is still widely executed to avoid boar taint, although alternative methods already exist. While information about suffered pain is available, skin wound dimensions and healing are neglected in many studies. The impact of surgeon and anaesthesia onto dimensions of skin incisions was evaluated in two farms.

Material & Methods

Skin incisions were measured immediately after castration in 178 male piglets. In farm A, two farm-employees castrated piglets on days 6-7 of life without anaesthesia (n=59), while in farm B two surgeons castrated piglets on 1-4 days of age under isoflurane inhalation anaesthesia (n=119). A potential injury caused by double Improvac[®] vaccination was assessed by taking the dimensions of the recommended needles into account.

Results

The mean length of the sum of incisions in one individual was 34.9±8.6 mm in farm A and 35.2±8.1 mm in farm B with significantly higher values in anaesthetized animals. Surgeons differed in their experience and skin incision technique (two parallel cuts or one horizontal cut), thus mean length difference between surgeons was highly significant (p<0.0001). There was no correlation between the piglets' age and the length of incisions.

Discussion and Conclusion

Longer incisions in anaesthetized animals in this study might be due to better skilled surgeons castrating without anaesthesia. As alternatives for surgical castration are available, it must be assessed, if non-surgical alternatives as immunocastration can be implemented in the future. The depth of penetration of needles provided with the safety system of Simcro[™] Sekurus[™] for application of Improvac[®] is 9 or 15 mm, resulting in sting-lengths of 18 or 30 mm after double injections, which is less than the incisions length caused by surgical castration. As margins of wounds were not completely adapted after surgery, the 1.6 mm diameter of the needle was not taken into account for injury comparison.