13.3.

Effect of combined application of prostaglandins and oxytocin on the duration of parturition and number of newborn piglets of sows

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INTRODUCTION

Process of farrowing in sows on farms represents the most delicate stage in the production of piglets. It is best to finish the delivery as soon as possible, because in this way sows recover as soon as possible, and allows the piglets to suck colostrum. In order to achieve the shortest duration of parturation, in the control farrowing most often are applied uterotonics, such as oxytocin in combination with drugs for induction of parturition (prostaglandin analogues, PGF_2-alpha).

The aim of this study was to examine the extent to which prostaglandins F_2-alfa (applied alone or in combination with oxytocin) influence on the duration of parturition, and the number of liveborn piglets.

MATERIALS AND METHODS

The experiments were performed *in vivo* on 133 pregnant sows, breeds Landrace-Yorkshire, which were divided into nine groups. The animals of the first three groups were administered prostaglandin F_2-alfa (Dinoprost), i.m. at a single dose of 2 ml, at 112 days of gestation and once (after farrowing fifth piglet-second group) oxytocin (Oxytokel), i.m., at a dose of 2 ml per animal (eq. 20 units per animal) or twice (after farrowing fifth and tenth piglet-third group) oxytocin, i.m., at a dose of 2 ml per animal (eq. 20 units per animal) first time and then 1.5 ml per animal (eq. 15 units per animal) second time. All of this was done at 113 days (groups IV, V, VI) and at 114 days of gestation (groups VII, VIII, IX).

RESULTS

The obtained results showed that average duration of farrowing was the shortest (4.56 h) in sows which is applied only prostaglandin at 114 days of gestation, and the longest (7.17 h) in sows treated with prostaglandin at 112 day of gestation with twofold application of oxytocin. The largest number of newborn piglets (20, 47) have been reported in sows which were treated with prostaglandin at 113th day of pregnancy in combination with twofold application of oxytocin.

CONCLUSION

On the base of all results it may be concluded that the best effect is achieved (duration of partus and number of newborn piglet) when prostaglandin applied in combination of oxytocin (twofold) at 113th day of pregnancy.

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13.4.

Legal status regarding distribution/dispensing and administration of veterinary medicines in Republic of Macedonia

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INTRODUCTION

Animal medicines play an important role in the control and prevention of disease but have the potential to cause harm if not used properly. The use of veterinary medicines (VM) can sometimes result in residues in foods taken from the treated animals and can seriously endangered the health of people as potential consumers. Therefore, the significance of control of the VM in these animals is exceptionally high. These include statutory controls on the authorisation, distribution and use of such medicines. The aim of this paper is to show legal status regarding distribution/dispensing and administration of VM in Macedonia (RM) in order to identify legal weaknesses.

MATERIALS AND METHODS

National Law on VM (Article 47) provides legal basis for distribution of VM in categories. Following evaluation of scientific data provided by the MAH, for each VM is granted a specific distribution category by the Food and Veterinary Agency (FVA) when it is for first time authorised. The data was collected from the web site of sector for Public Health in FVA and was compared with Veterinary Medicines Regulations in other countries.

RESULTS

All VM in the RM are assigned into one of six distribution categories. Only veterinary surgeons (VS) are entitled to prescribe VM and they must be dispensed from registered premises. The highest level of control is the VM intended for food production animals which can be used only in veterinary premisses by the VS or under their direct responsibility. This would include VM containing controlled drugs and those intended for administration only following a diagnosis and clinical assessment of the animal(s). VM which can be dispensed in veterinary pharmacies only by written prescription is intended for food production animals but is not required a clinical assessment. VM intended for non-food production animals may be supplied by any retailer without any restrictions, or provision of advice.