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FoalinMare: Insights Inside the Foaling Mare

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Computer-generated images commonly used to animate computer games are applied to elucidate the prodromi and parturition in the mare. A three-dimensional animated educational DVD for enhancing veterinary training in equine obstetrics is now available for theriogenologists, veterinarians, grooms, and horse breeders. Authors' address: Department of Reproduction, Obstetrics and Herd Health, Faculty of Veterinary Medicine, Ghent University, Salisburylaan 133, B-9820 Ghent, Belgium; e-mail: jan.govaere@ugent.be (Govaere). © 2009 AAEP.

1. Introduction

In comparison with other domestic animals, parturition in the horse is a fast and almost explosive event. Mostly, it takes place in an uncomplicated manner, but when difficulties arise, adequate veterinary intervention can be life saving. Most of these life-saving interventions can only be learned from bitter experience, with all the consequences that this involves.

The objectives of this project were to provide veterinary surgeons and students, grooms, and horse owners with more "insights inside" the foaling mare. This was done by creating a model to visualize the entire birth process from stage I through stage III.

2. Materials and Methods

Artists created a computer-aided design of an anatomic model of a pregnant mare. Computer graphics were used to generate countless images for each sequence to produce live action footage. All details

thus captured were checked by renowned specialists in equine obstetrics, and scientific considerations prevailed in the design.

Besides the animation of the normal birth process, many other animations were made. For example, 4 different presentations, 15 different malpostures, and several malpositions of the foal were used as points of departure. Finally, some pre- and post-partum complications, such as uterine torsion and inversion of the bladder and retained fetal membranes, were also animated. The entire production comes with voice-overs in English, Spanish, French, Italian, and German.

3. Results

In total, 27 scenes were created, forming ~45 min of animated film. A powerful tool has thus been made for enhancing and improving the education and training of practitioners, veterinary students, and grooms in the field of equine obstetrics.

NOTES

4. Discussion

A three-dimensional animated educational DVD that elucidates prodromi, malpresentations, malpostures, and malpositions in equine obstetrics is now available for enhancing veterinary training in equine obstetrics. Treatment options, suggested repositions, and possible obstetrical manipulations

are animated, and a complete animated overview of the equine peripartum period is given.

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