

Optimizing Bovine Abortion Diagnostics

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Abstract

Very few aborted bovine fetuses have distinctive pathologic changes that contribute to confirming a diagnosis, with the exception of fetuses with congenital anomalies, thus sending an intact fetus to a diagnostic laboratory for necropsy by a pathologist rarely enhances the prospects for obtaining a positive diagnosis. In fact, it is questionable whether necropsies of aborted fetuses routinely merit the time of a busy veterinary practitioner, when a technician can be trained to collect, package and ship specimens as effectively and more efficiently. In addition, owners, managers, and herds-men can be recruited into the diagnostic team in herds with on-going abortion problems if proper training and supplies are provided. A protocol for proper specimen collection and packaging for diagnosis of bovine abortions, which can be used by veterinarians or for training technicians, will be presented.

Résumé

Très peu de fœtus avortés de bovin montrent des changements pathologiques distinctifs pouvant confirmer un diagnostic, à l'exception des fœtus atteints d'anomalies congénitales. Par conséquent, envoyer un fœtus intact à un laboratoire de diagnostic en vue d'une nécropsie par un pathologiste augmente rarement les chances d'obtenir un diagnostic positif. En fait, on peut se demander si la nécropsie routinière des fœtus mérite le temps et le travail d'un vétérinaire occupé, quand on peut entraîner un technicien à recueillir, à emballer et à expédier les spécimens avec autant de compétence et un meilleur rendement. De plus, il serait logique de recruter dans l'équipe de diagnostic les propriétaires, les gérants d'élevage et les soigneurs de bovins, dans les troupeaux à problèmes d'avortements récurrents, si l'on s'assure d'apporter la formation et le matériel nécessaires. Nous présentons ici un protocole de cueillette et d'emballage appropriés de fœtus avortés

pouvant servir autant aux vétérinaires qu'aux techniciens formés, en vue d'un diagnostic.

Introduction

Diagnosis of abortions is notoriously discouraging for animal owners, their veterinarians and the veterinary laboratory diagnosticians. Despite significant advances over the past two decades in development of new laboratory diagnostic technologies and techniques, and even discovery of a few new abortion-causing diseases, positive diagnoses are not obtained for the majority of abortion cases submitted to veterinary diagnostic laboratories.

Realities of Diagnosis

Collection of suitable specimens from aborted fetuses as quickly as possible following abortion and proper packaging of these specimens for shipment to a diagnostic laboratory can at least optimize the chance that a positive diagnosis will be obtained.

Very few aborted bovine fetuses have distinctive pathologic changes that contribute to confirming a diagnosis, with the exception of fetuses with congenital anomalies, thus sending an intact fetus to a diagnostic laboratory for necropsy by a pathologist rarely enhances the prospects for obtaining a positive diagnosis. In fact, it is questionable whether necropsies of aborted fetuses routinely merit the time of a busy veterinary practitioner, when a technician can be trained to collect, package and ship specimens as effectively and more efficiently. In fact, owners, managers and herds-men can be recruited into the diagnostic team in herds with on-going abortion problems if proper training and supplies are provided. A protocol for proper specimen collection and packaging for diagnosis of bovine abortions, which can be used by veterinarians or for training technicians will be presented.