

Preface



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Guest Editor

What do veterinary practitioners, surgeons, internists, and theriogenologists, who are all routinely involved in cattle health management, have in common? Perhaps some items such as a stethoscope, transrectal gloves, and an ultrasound device.

In the early 1980s, ultrasonography began to be used as an important ancillary test at the farm for reproduction monitoring. With continued technologic advances in ultrasound equipment and clinical research performed by pioneers on nonreproductive applications of bovine ultrasonography, this medical imaging technique emerged as a noninvasive, very informative ancillary test with no withdrawal time that can be used for multiple purposes in teaching institutes and by the internist, the surgeon, the theriogenologist, and bovine practitioners in an on-farm setting.

With the numerous interesting published studies on bovine ultrasonography and the absence of an English textbook on extragenital use of bovine ultrasound (the only ones available are written in German¹ and French²), it was important to dedicate an issue of the *Veterinary Clinics of North America: Food Animal Practice* to the multiple uses of ultrasound in cattle.

In working with dairy or beef cattle, we are usually trying to practice cost-effective medicine; therefore, any noninvasive tool that can allow a more accurate diagnosis and avoid unnecessary treatment is of primary importance.

Besides the major classical applications of ultrasonography for reproductive tract assessment, it allows one to establish a diagnosis (sometimes a prognosis) and to monitor progression of therapy of the major diseases encountered in bovine practice. For these reasons, it is an interesting ancillary tool that allows a cow-side diagnosis and can spare time and money for the producer or pain for the suffering animal. The information available on the use of ultrasound as an ancillary test continues to grow in peer-reviewed publications concerning experimental and clinical studies. Although it is currently not widely available for the bovine practitioner, some pilot studies concerning the use of Doppler in cattle are now available and show the potential of this function. Therefore, although the ultrasonographic applications presented here are not exhaustive, they aim to present the most useful and practical indications of ultrasonography for veterinarians working with cattle in on-farm or hospital settings.

This issue could not have been possible without Dr. Robert Smith and his enthusiasm for this topic. I also want to acknowledge John Vassallo for the impressive work that was performed by the editorial team in constructing a highly illustrated issue.

In preparing this issue, I was helped by leaders of bovine ultrasonography throughout the world. I want to acknowledge all of them for their irreplaceable contributions that give a high value to this issue. I am very proud of this issue, and I hope that every veterinarian interested in bovine medicine will enjoy it!

I sincerely hope that this issue of the *Veterinary Clinics of North America: Food Animal Practice* will be of practical help and in every truck of bovine practitioners.

So, on your probes... ready... go!

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