

## REFERENCES

- Barros, B.J.P. and J.A. Visintin. 2001. Ultrasonic control of early pregnancies, embryonic and fetal mortalities and fetal sex in zebu cattle. *Brazilian Journal of Veterinary Research and Animal Science*. 38: 74–79.
- Beck, C. and R.B. Lavelle. 2001. Feline polycystic kidney disease in Persian and other cats: a prospective study using ultrasonography. *Australian Veterinary Journal*. 79: 181–184.
- Bretzlaff, K., J. Edwards, D. Forrest and L. Nuti. 1993. Ultrasonographic determination of pregnancy in small ruminants. *Veterinary Medicine*. 88: 12-24.
- Bretzlaff, K.N. and J.E. Romano. 2001. Advanced reproductive techniques in goats. *Veterinary Clinical North America Food Animal Practice*. 17: 421–434.
- Buckrell, B.C., B.N. Bonnett and W.H. Johnson. 1986. The use of real-time ultrasound rectally for early pregnancy diagnosis in sheep. *Theriogenology*. 25: 665-673.
- Buckrell, B.C. 1988. Applications of ultrasonography in reproduction in sheep and goats. *Theriogenology*. 29: 17-84.
- Burstel, D., S. Meinecke-Tillmann and B. Meinecke. 2001. Ultrasonographic determination of fetal sex in small ruminants. *In: Fifth Annual Conference of the European Society for Domestic Animal Reproduction, Vienna, ESDAR Newsletter, vol. 6, pp. 53–54.*
- Burstel, D., S. Meinecke-Tillmann and B. Meinecke. 2002. Ultrasonographic diagnosis of fetal sex in small ruminants bearing multiple fetuses. *The Veterinary Record*. 151: 635–636.
- Brown, T.G. 1960. Direct contact ultrasonic scanning technique for the visualization of abdominal masses. *In: Smyth, C.H. (Ed.), International Conference on Electronics. Illiffe and Sons, London, pp. 358-366.*
- Cannon, M.J., A.D. Mackay, F.J. Barr, H. Rudolf, K.J. Bradley and T.J. Gruffydd-Jones. 2001. Prevalence of polycystic kidney disease in Persian cats in the United Kingdom. *Veterinary Record*. 149: 409–411.
- Coubrough, C.A. and M.C. Castell. 1998. Fetal sex determination by ultrasonically locating the genital tubercle in ewes. *Theriogenology*. 50: 263–267.
- Curran, S., J.P. Kastelic and O.J. Ginther. 1989. Determining sex of the bovine fetus by ultrasonic assessment of the relative location of the genital tubercle. *Animal Reproduction Science*. 19: 217–227.
- Curran, S. and O.J. Ginther. 1991. Ultrasonic determination of fetal gender in horses and cattle under farm conditions. *Theriogenology*. 36: 809–814.

- Curran, S. 1992. Fetal sex determination in cattle and horses by ultrasonography. *Theriogenology*. 37: 17–21.
- Curran, S. and O.J. Ginther. 1995. M-mode ultrasonic assessment of equine fetal heart rate. *Theriogenology*. 44: 609–617.
- Curry, T.S., J.E. Dowdey and R.C. Murry. 1990. Ultrasound. *In*: Curry, T.S., Dowdey, J.E., Murray, R.C. (Eds.), *Christensens Physics of Diagnostic Radiology*, fourth edition. Williams & Wilkins, Philadelphia, PA, pp. 323–371.
- Cruz, J.F., D. Rondina and V.J.F. Freitas. 2005. Ovarian follicular dynamics during anoestrus in Anglo-Nubian and Saanen goats raised in tropical climate. *Tropical Animal Health Production*. 37: 395-402.
- Dawson, L.J., T. Sahl, S.P. Hart, G. Detweiler, T.A. Gipson, T.H. Teh, G.A. Henry and R.J. Bahr. 1994. Determination of fetal number of alpine does by real time ultrasonography. *Small Ruminant Research*. 14: 225–231.
- De Castro, T., E. Rubianes, A. Menchaca and A.Rivero. 1999. Ovarian dynamics, serum estradiol and progesterone concentrations during the interovulatory interval in goats. *Theriogenology*. 52: 399–411.
- Dickie, A.M., R. Doust, L. Cromarty, V.S. Johnson, M. Sullivan and J.S. Boyd. 2003. Comparison of ultrasonography, radiography and a single computed tomography slice for the identification of fluid within the canine tympanic bulla. *Research in Veterinary Science*. 75: 209–216.
- Doize, F., D. Vaillancourt, H. Carabin and D. Belanger. 1997. Determination of gestational age in sheep and goats transrectal ultrasonographic measurement of placentome. *Theriogenology*. 48: 449–460.
- Dukes-McEwan, J. 2003. Breed schemes for heart disease. *In*: *Scientific Proceedings Veterinary Programme: British Small Animal Veterinary Association 46th Annual Congress*, Birmingham, UK, pp. 163–166.
- Dussik, K.T., F. Dussik and L.Wyt. 1947. Auf dem wege zur hyperphonographic des gehirnes. *Wiener Medizinische Wochenschrift*. 97: 425–429.
- Edler, I. and C.H. Hertz. 1954. The use of ultrasonic reflectoscope for the continuous recording of movements of the heart valves. *Kurgyl Fysiogr , Sallsk (Lund) Fordhandl*. 24: 1.
- Fowler, D.G. and J.F. Wilkins. 1984. Diagnosis of pregnancy and number of fetuses in sheep by real-time ultrasound imaging. Effects of number of fetuses, stage of gestation, operator and breed of ewe on accuracy of diagnosis. *Livestock Production Science*. 11: 437-450.
- Fraser, A.F. and J.G. Robertson. 1967. The detection of foetal life in ewes and sows. *Veterinary Record*. 80: 528-529.

- Fraser, A.F. and J.G. Robertson. 1968. Pregnancy diagnosis and detection of foetal life in sheep and pigs by an ultrasonic method. *Brazilian Veterinary Journal*. 124: 239-244.
- Garcia, A., M.K. Neary, G.R. Kelly and R.A. Pierson. 1993. Accuracy of ultrasonography in early pregnancy diagnosis in the ewe. *Theriogenology*. 39: 847-861.
- Ginther, O.J. and K. Kot. 1994. Follicular dynamics during the ovulatory season in goats. *Theriogenology*. 42: 987-1001.
- Gonzalez, F., F. Cabrera, M. Batista, N. Rodriguez, D. Alamo, J. Sulon, B. Jean-Francois and A. Gracia. 2004. A comparison of diagnosis of pregnancy in the goat via transrectal ultrasound scanning, progesterone and pregnancy-associated glycoprotein assays. *Theriogenology*. 62: 1108-1115.
- Gonzalez-Bulnes, A., J.S. Moreno and A.L. Sebastian. 1998. Estimation of fetal development in Manchega dairy ewes by transrectal ultrasonographic measurements. *Small Ruminant Research*. 27: 243-250.
- Gonzalez de Bulnes, A., K. Osoro and A.L. Sebastian. 1999. Ultrasonographic assessment of the ovarian response in eCG treated goats. *Small Ruminant Research*. 34: 65-69.
- Gonzalez-Bulnes, A., C. Diaz-Delfa, B. Urrutia, J.A. Carrizosa and A. Lopez-Sebastian. 2004. Ultrasonographic screening of the ovulatory process in goats. *Small Ruminant Research*. 52: 165-168.
- Green, R.W. 1996. Green, R.W. (Ed.), *Small Animal Ultrasound*, 1st ed. Lippincott/Raven Press, Philadelphia, PA/New York.
- Haibel, G.K. 1990. Use of ultrasonography in reproductive management of sheep and goat herds. *In*: Smith, M.C. (Ed.), *Advances in Sheep and Goat Medicine. The Veterinary Clinics of North America Food Animal Practice*, vol. 6, no. 3. W.B. Saunders, Philadelphia, pp. 597-613.
- Haibel, G.K. and N.R. Perkins. 1989. Real-time ultrasonic biparietal diameter of second trimester Suffolk and Finn sheep fetuses and prediction of gestational age. *Theriogenology*. 32: 863-869.
- Hesselink, J.W. and M.A.M. Taverne. 1994. Ultrasonography of the uterus of the goat. *Veterinary Quart*. 16: 41-45.
- Herring, D.S. and G. Bjornton. 1985. Physics, facts and artifacts of diagnostic ultrasound. *Veterinary Clinics of North America Small Animal Practice*. 15: 1107-1122.
- Holtz, W. 1982. Pregnancy detection in swine by pulse mode ultrasound. *Animal Reproduction Science*. 4: 219-226.

- Ishwar, A.K. 1995. Pregnancy diagnosis in sheep and goats a review. *Small Ruminant Research*. 17: 37-44.
- Kahn, W. 1992. Ultrasonography as a diagnostic tool in female animal reproduction. *Animal Reproduction Science*. 28: 1-10.
- Karen, A., K. Szabados, J. Reiczigel, J. Beckers and O. Szenci. 2004. Accuracy of transrectal ultrasonography for determination of pregnancy in sheep: effect of fasting and handling of the animals. *Theriogenology*. 61: 1291–1298.
- Karen, A., B.E. Amiri, J. Beckers, J. Sulon, M.A.M. Taverne and O. Szenci. 2006. Comparison of accuracy of transabdominal ultrasonography, progesterone and pregnancy-associated glycoproteins tests for discrimination between single and multiple pregnancy in sheep. *Theriogenology*. 66: 314-322.
- Karen, A.M., M.F. El-Sayed and S.A. Saber. 2008. Estimation of gestational age in Egyptian native goats by ultrasonographic fetometry. *Animal Reproduction Science* (Accepted).
- Kastelic, J.P., R.A. Pierson and O.J. Ginther. 1990. Ultrasonic morphology of corporea luteal cavities during the estrus cycle and early pregnancy in heifers. *Theriogenology*. 34: 487–498.
- Kaulfuss, K.H., N. Zipper, J. May and R. Suess. 1996. Pregnancy diagnosis by B-mode ultrasonography in sheep. Part 2: Comparison of transcutaneous and transrectal diagnosis. *Tieraerztl. Praxis*. 24: 559–566.
- King, A.M. 2006. Development, advances and applications of diagnostic ultrasound in animals. *The Veterinary Journal*. 171: 408-420.
- Kito, S., K. Okuda, K. Miyazawa and K. Sato. 1986. Study on the appearance of the cavity in the corpus luteum of cows by using ultrasonic scanning. *Theriogenology*. 25: 325–333.
- Ley, W.B. 1985. Influence of the site on early embryonic losses in domestic large animals. *Comp. Cont.* 7: 277-282.
- Light, H. 1969. Non-injurious ultrasonic technique for observing flow in the human aorta. *Nature*. 224: 1119.
- Lindhahl, I.L. 1966. Detection of pregnancy in sheep by means of ultrasound. *Nature*. 212: 642–643.
- Lindhahl, I.L. 1968. Pregnancy diagnosis in ewes in continual breeding. *Journal Animal Science*. 27: 1511 (abstract).
- Lindhahl, I.L. 1969. Comparison of ultrasonic techniques for the detection of pregnancy in ewes. *Journal Reproduction Fertility*. 18: 117-120.

Lindahl, I.L. 1971. Pregnancy diagnosis in ewe by intrarectal Doppler. *Journal Animal Science*. 32: 922-925.

Maico, H.B., M.C. Rabelo, C. Rocha de Aguiar Filho, C.H. Dezzoti, H. Reichenbach, J.P. Neves, P. Fernandes de Lima and M.A. Lemos de Oliveira. 2007. Accuracy of early fetal sex determination by ultrasonic assessment in goats. *Veterinary Science*. 83: 251–255.

Mailhac, J.M., S. Chaffaux, J.J. LeGrand, B. Carlier and F. H&A. 1980. Diagnostic de la gestation chez la chatte: utilisation de échographie. *Recl Méd. Vét. EC. Alfort*. 156: 899-907.

Martinez, M.F., P. Bosch and R.A. Bosch. 1998. Determination of early pregnancy and embryonic growth in goats by transrectal ultrasound scanning. *Theriogenology*. 49: 1555-1565.

Maxson A.D., T.M. Wachira, E.E. Zeyhle, A. Fine, T.W. Mwangi and G. Smith. 1996. The use of ultrasound to study the prevalence of hydatid cysts in the right lung and liver of sheep and goats in Turkana, Kenya. *International Journal of Parasitology*. 26: 1335-1338.

Medan, M.S., G. Watanabe, K. Sasaki, S. Sharawy, N.P. Groome and K. Taya. 2003. Ovarian dynamics and their associations with peripheral concentrations of gonadotropins, ovarian steroids and inhibin during the estrous cycle in goats. *Biology Reproduction*. 69: 57–63.

Medan, M., G. Watanabe and K. Sasaki. 2004. Early pregnancy diagnosis by means of ultrasonography as a method of improving reproductive efficiency in goats. *Journal of Reproduction and Development*. 50: 391-397.

Memon, M.A. and R.S. Ott. 1980. Methods of pregnancy diagnosis in sheep and goats. *Cornell Veterinary*. 70: 226–231.

Meredith, M.J. and O.K. Madani. 1980. The detection of pregnancy in sheep by A-mode ultrasound. *Brazilian Veterinary Journal*. 136: 325-330.

Moreno, J.C., C.S. Chavez and K. Bickhardt. 1996. Fetal heart rate and real-time ultrasonic fetometry for determination of fetal age in sheep. *Deutsche Tierärztliche Wochenschrift*. 103: 478–480.

Nyland, T.G., D.E. Hill, A.G. Hendtckx, T.B. Farver, J.P. McGahan, R. Henrickson, J. Andemon and H.E. Phillips. 1984. Ultrasonic assessment of fetal growth in the nonhuman primate. *Journal Clinical Ultrasound*. 12: 387-395.

Nyland, T.G. and J.S. Mattoon, (Eds.) 2002. *Small Animal Diagnostic Ultrasound*, second edition. W.B. Saunders, Philadelphia, PA.

Oliveira, M.A.L., M.H.B. Santos, E.P.B.X. Moraes, R.T.D. Moura, A. Chiamenti, F.Q.G. Bezerra, M.C. Rabelo and P.F. Lima. 2005. Early identification of foetal sex and

determination of the genital tubercle migration's day in dairy goats using ultrasound. *Acta Scientiae Veterinariae*. 32: 353.

Omran, S.N., T.R. Ayliffe and J.S. Boyd. 1988. Preliminary observations of bovine ovarian structures using B-mode real time ultrasound. *Veterinary Research*. 122: 465–466.

Orita, J., T. Tanaka, H. Kamonae and Y. Kaneda. 2000. Ultrasonography observation of follicular and luteal dynamics during the oestrous cycle in Shiba goats. *Journal Reproduction Development*. 46: 31–37.

Ott, R.S., W.F. Bann, T.F. Lock, M.A. Memon and J.L. Stowater. 1981. A comparison of intrarectal Doppler and rectal abdominal palpation for pregnancy testing in goats. *Journal Animal Veterinary Medical Association*. 178: 730-731.

Padilla-Rivas, G., B. Sohnrey and W. Holtz. 2005. Early pregnancy detection by real-time ultrasonography in Boer goats. *Small Ruminant Research*. 58: 87–92.

Palmer, E. and M.A. Driancourt. 1980. Use of ultrasonic echography in equine gynecology. *Theriogenology*. 13: 203-216.

Pierson, R.A. and O.J. Ginther. 1987. Reliability of diagnostic ultrasonography for identification and measurement of follicles and detecting the corpus luteum in heifers. *Theriogenology*. 28: 929–936.

Pierson, R.A. and G.P. Adams. 1999. Remote assessment of ovarian response and follicular status using visual analysis of ultrasound images. *Theriogenology*. 51: 47–57.

Preston, R.C. and A. Shaw. 2001. Recommended Ultrasound Field Safety Classification for Medical Diagnostic Devices 1–16. National Physics Laboratory, Middlesex.

Ribadu, A.Y. and T. Nakao. 1999. Bovine reproductive ultrasonography: a review. *Journal of Reproduction and Development*. 45: 13–28.

Riesenberg, S., S. Meinecke-Tillmann and B. Meineke. 2001. Ultrasonic survey of follicular development following superovulation with a single application of pFSH, eCG or HMG in goats. *Small Ruminant Research*. 40: 83-93.

Romano, J.E. 1998. The effect of continuous presence of bucks on hastening the onset of estrus in synchronized does during the breeding season. *Small Ruminant Research*. 30: 99–103.

Romano, J.E. and C.J. Christians. 2008. Early pregnancy diagnosis by transrectal ultrasonography in ewes. *Small Ruminant Research*. 77: 51-57.

Sabbagha, R.E., I.H. Turner and R.A. Cbez. 1975. Sonarbi-parietal diameter growth standards in the rhesus monkey. *American Journal of Obstetrics & Gynecology*. 121: 371-374.

- Santos, M.H.B., E.P.B.X. Moraes, R.T.D. Moura, A. Chiamenti, F.Q.G. Bezerra, C.R. A. Filho, P.F. Lima and M.A.L. Oliveira. 2005. Fetal sexing in goats by ultrasonography. *Acta Scientiae Veterinariae*. 32: 354.
- Scheerboom, J.E.M. and M.A.M. Taverne. 1985. A study of the pregnant uterus of the ewe and the goat using real-time ultrasound scanning and electromyography. *Veterinary Research Communications*. 9: 45-56.
- Schrick, F.N. and E.K. Inskip. 1993. Determination of early pregnancy in ewes utilizing transrectal ultrasonography. *Theriogenology*. 40: 295–306.
- Shone, D.K. and J.W. Fricker. 1969. The diagnosis of pregnancy in the ewe with an ultrasonic foetal pulse detector. *Journal of South Africa Veterinary Medicine Association*. 40: 377-378.
- Simoes, J., J. Potes, J. Azevedo, J.C. Almeida, P. Fontes, G. Baril and R. Mascarenhas. 2005. Morphometry of ovarian structures by transrectal ultrasonography in Serrana goats. *Animal Reproduction Science*. 85: 263–273.
- Sprecher, D.J., R.L. Nebel and S.S. Whitman. 1989. The predictive value, sensitivity and specificity of palpation per rectum and transrectal ultrasonography for the determination of bovine luteal status. *Theriogenology*. 31: 1165.
- Stroud, B.K. 1996. Using ultrasonography to determine bovine fetal sex. *Veterinary Medicine*. 91: 663–672.
- Suguna, K., S. Mehrotra, S.K. Agarwal, M. Hoque, S.K. Singh, U. Shanker and T. Sarath. 2008. Early pregnancy diagnosis and embryonic and fetal development using real time B mode ultrasound in goats. *Small Ruminant Research*. 80: 80–86.
- Temple, R.S., H.H. Stonaker, D. Howry, G. Posakony and M.H. Hazaleus. 1956. Ultrasonic and conductive methods for estimating fat thickness in live cattle. *In: Proceedings of the American Society of Animal Production, Western Section* 7.
- Teixeira, D.I.A., E.S. Lopes-Junior, F.C. Sousa, E.S.P. Pinheiro, I.A. Serova, L.E. Andreeva and V.J.F. Freitas. 2008. The use of real-time ultrasonography to select embryo donors participating in a transgenesis goat programme. *Small Ruminant Research*. 76: 215-219.
- Thwaites, C.J. 1981. Development of ultrasonic techniques for pregnancy diagnosis in the ewe. *Animal Breeding Abstract*. 49: 427–434.
- Wani, G.M. 1981. Ultrasonic pregnancy diagnosis in sheep and goats. *World Rev. Animal Production*. 17: 4348.
- Wani, N.A., G.M. Wani, A.M. Mufti and M.Z. Kha. 1998. Ultrasonic pregnancy diagnosis in gaddi goats. *Small Ruminant Research*. 29: 239–240.

Watt, B.R., G.A. Anderson and L.P. Campell. 1984. A comparison of six methods used for detecting pregnancy in sheep. *Australian Veterinary Journal*. 61: 377-381.

Wells, P.N.T. 1969. A range-gated ultrasonic Doppler system. *Medical and Biological Engineering*. 7: 641.

White, I.R. and A.J.F Russel. 1984. Determination of fetal numbers in sheep by real-time ultrasonic scanning. *In Practice*, 6: 200-202.

White I.R., A.J.F. Russel and D.G. Fowler. 1984. Real-time ultrasonic scanning in the diagnosis of pregnancy and the determination of foetal numbers in sheep. *Veterinary Research*. 115: 140–143.

Wilkins, J.K. and D.G. Fowler. 1984. Ultrasound for litter size diagnosis in breeding flocks. *In: Reproduction in Sheep. Editors: Lindsay and Pearle. Cambridge Press, Cambridge, pp. 182-184.*