The Application of Ultrasonography in the Pregnancy Diagnosis of Goat in Taiwan
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ABSTRACT To evaluate the clinical application of ultrasonography, the portable ultrasound was used for the pregnancy diagnosis of goat in Taiwan. A total of 571 out of 1053 does (54.23%) were diagnosed to be pregnant. A relative higher pregnant rate (58.18%-62.42%) was found between October and January. The pregnant goats were categorized by the ultrasonography as early, middle, or late stage. Around day 20 of gestation, small anechoic fluid-filled cavity surrounded by a layer of hypochoicogenic uterine wall was observed. The cavity enlarged later on, and the hypochoicogenic embryonic mass and fetal membrane appeared gradually. The shape of fetus could be distinguished after day 50, and the structure of fetal head, thorax, heartbeat, abdomen, vertebrae, ribs, limbs, tail and caruncle could be readily observed. Beyond day 100 most of the fetal internal organs were well developed, and easily identified. Forty-seven cases (4.46%) were diagnosed as hydrometra, and small to large anechoic fluid-filled cavities without any pregnant characteristics were observed. The correlation of the size of caruncle and the day of gestation was analyzed and the pregnancy stage could be estimated as: day of pregnancy (day) = 16.17 x size of caruncle (cm) + 31.78, and R² = 0.6362. Thus, ultrasonography could be used for pregnancy diagnosis of goats in Taiwan, and its usage should be beneficial to the reproductive management. [*Shyu JJ, Cheng CH, Wu YL, Chi CH. The Application of Ultrasonography in the Pregnancy Diagnosis of Goat in Taiwan. Taiwan Vet J 30 (3): 247-255, 2004. *Corresponding author TEL: 02-2362 8346, 02-2362 0246, E-mail: jjvetmed@ntu.edu.tw]

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