

Study of the ultrasonographic findings of the urinary system in the Lori Bakhtiari rams

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Received: 15.10.2017

Accepted: 23.05.2018

Abstract

The main aims of the present study were to determine correlations between length, width, height and volume of the kidney by ultrasonography and real measurements and ultrasonographic findings of the urinary system in the Lori Bakhtiari Rams. This study was conducted on 20 healthy Lori Bakhtiari Rams. The transducer was placed over the right flank to exam the kidney. The urinary bladder was scanned from the right flank and transrectal method. After slaughtering of the rams, kidney's dimensions were measured directly. All of the measurements were compared with real measurements with linear regression analysis. The result of present study showed that the right kidney scanned in 12th intercostal space and behind the last rib high on the right flank and the left kidney was found in the middle of right flank. The kidney had similar echogenicity to the kidneys of other animals. The two kidneys were of nearly equal size. The right kidney length, width and depth were 62.3, 30.2 and 36.7 mm, the diameter of the cortex and medulla were 7.5 and 7.7 mm, length and width of the sinus were 30.4 and 9.8 mm and parenchymal diameter was 13.6 mm and volume was 32.1 cm³ respectively. There were positive and significant correlations between the ultrasonographic and real measurement of renal length, width, height and volume. The urinary bladder could be scanned only from a transrectal method. The contents of the bladder were anechoic and bladder wall was uniformly thick and smooth. The ureters could not be visualized in any rams.

Key words: Kidney, Ultrasonography, Lori Bakhtiari Sheep, Rams

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