

Abstract:

ECG is used as a common method in cardiac arrhythmia diagnosis because of cardiovascular system's importance. Complete cardiovascular system examination should include cardiography as well, because this technique is the most precise method for diagnosis of dysrhythmia and conductive anomalies. Application of ECG in bovine examination helps in atrial fibrillation and arrhythmia recognition. Even though its potential application is well known, there isn't a normal ECG parameter as a reference. As a breed of Zebu or Bos Indicus, Sistani cow is one of Irans native breeds that is usually found in Sistan region and is considered as this regions native breed. The aim of this study was to collect data about heart rhythm and beat, Duration and Amplitude of ECG waves and the mean of electrical axis for normal ECG design. In the present study, 30 heads of Sistani cow were entered to study and the electrocardiographic Parameters was described. The mean heart rate, mean of electrical axis, Duration and Amplitude of various waves of ECG and PR, QT, RR intervals and reformed QT interval for 6 limb standard leads (I, II, III, aVR, aVL, aVF) and base-apex lead were calculated. The average rate of heart beat in Sistani cow was (66.3 ± 7.821) bpm, the mean electrical apex was (-158.045 ± 30.219) degrees, Duration of P, QRS and T waves were (0.066 ± 0.013) , (0.066 ± 0.007) and (0.096 ± 0.014) Second Respectively, the amplitude of P and T waves were (0.084 ± 0.039) , (0.209 ± 0.105) mv respectively and PR, QT, RR intervals and reformed QT intervals were calculated as (0.158 ± 0.004) , (0.361 ± 0.006) , (0.765 ± 0.03) and (0.413 ± 0.009) second respectively. In this study Sistani cows electrocardiographic parameters didn't show much difference from other breeds, and the best and the most reliable lead in studying cardiac electroconduction system in Sistani cow is the base apex.

Keyword: Heart, Electrocardiography, Sistani cow



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