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CARDIOVASCULAR MANIFESTATIONS OF LEPTOSPIROSIS- A RETROSPECTIVE STUDY OF PATIENTS ADMITTED AT A TERTIARY CARE HOSPITAL IN COASTAL KARNATAKA REGION

ASMITHA G. NAYAK

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Asmitha G Nayak1, Sanjana Nambiar P K1, Dr. Sudhakar Rao2, Jyothi Samanth1
1: Department of Cardiovascular Technology, MCHP, MAHE
2: Department of Cardiology, KMC, MAHE

BACKGROUND: Leptospirosis is an endemic disease caused by the gram-negative bacteria species of Leptospira. The clinical presentation in humans vary from asymptomatic to Multi-organ dysfunction (MODS).Although cardiac changes in leptospirosis can predict the mortality in severe cases of leptospirosis, only few studies have emphasized on cardiac involvement.

OBJECTIVES: 1. To evaluate cardiovascular manifestations of leptospirosis in patients admitted at a tertiary care hospital in coastal Karnataka region. 2. Prevalence of various cardiovascular manifestations among leptospirosis patients. 3. To study the association between severity of leptospirosis and cardiovascular manifestation

METHOD: This was a retrospective study conducted at a tertiary care hospital in South India. All the patients admitted between January 2016- September 2020 who met the clinical criteria for leptospirosis; ELISA IgM positive and age>18 years were included

RESULTS&CONCLUSION: Cardiac manifestations in the form of ECG abnormalities and myocarditis is highly prevalent in leptospirosis. Most common ECG abnormalities include QTc prolongation and Sinus Tachycardia. Other changes include first degree AV block, Atrial fibrillation, ST-T changes, Sinus Bradycardia and conduction abnormalities . Males are more prone to have QTc prolongation than females. Myocarditis is a common cardiac manifestation in leptospirosis. It can be presented as either Isolated LV dysfunction, Isolated RV dysfunction or Biventricular dysfunction. Age, Sinus Tachycardia, Prolonged QTc interval, Hypertension and need for hemodialysis are predictors of mortality in leptospirosis. Myocarditis was associated with mortality. Diabetes and need for hemodialysis can predict combined outcomes involving myocarditis and mortality.