## PP048 LEPTOSPIROSIS WITH ACUTE PERICARDITIS; THE DIAGNOSTIC CHALLANGES

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## **INTRODUCTION**

Leptospirosis is a zoonosis widespread in the world, especially in the tropical countries, which may lead to multi-organ involvement during its course. The most affected organs are the kidney and liver, although being a systemic disease no organ is spared. Our aims are to present a severe case of leptospirosis with multiple organ failure (MOF) and complicated with pericarditis, challenge in diagnosis on presentation.

## **CASE REPORT**

Our case is an 18 years old gentleman, with no permorbid, was initially seen in the critical zone emergency department of Hospital Tuanku Ja'afar Seremban, Malaysia. He refers generalize chest pain, fever, headache, severe fatigue, and diffuse musculoskeletal tenderness more than five days. Denies any recent traveling, no tracking, no swimming at pool/river. The patient was alert and orientated, furthermore fever of 38°C, vital sign was stable. Patient ECG show widespread ST elevation (obvious at lead II, III, aVF, V4-V6); PR segment depression at lead II, III, aVF with a PR segment elevation over the lead aVR with Spodick sign. ECG was repeated several times, no dynamic changes seen. Troponin I was elevated (18.0). Based on clinical examination, ECG performed and the positive cardiac markers, the patient was diagnosed with acute pericarditis.

Patient was admitted to high dependency unit, treated as NSTEMI until positive results of specific serologic tests for leptospirosis IgM and IgG ELISA done in the ward due to high index of suspicion.

## **DISCUSSION AND CONCLUSION**

Leptospirosis is a systemic disease. The descriptions of cardiac involvement are common, underreported. The etiology and prevalence remain unclear. Severe leptospirosis may present a large variety of clinical outlines. Challenges comes with atypical presentation with no obvious exposure. Our case was interesting in terms of pericarditis complication. In general, diagnosis is based on initially upon clinical suspicion, epidemiology, confirmed later by the serology.