

Hepato-pulmonary-renal presentation with pericardial haemorrhage in a returning traveller: a severe case of leptospirosis.

Dr Saif Al-Chalabi¹, Dr Mark Brady²

¹Salford Royal Hospital NHS Foundation Trust, Salford, United Kingdom, ²Lancashire Teaching Hospitals NHS Foundation Trust, Preston, United Kingdom

Leptospirosis is an uncommon zoonotic infection that has a broad spectrum of presentation from mild asymptomatic illness to severe multi-organ damage, known as Weil's disease. We are presenting a particularly rare case of fulminant leptospirosis with severe multiple organ involvement. A middle-aged gentleman who gave a history of travel to a Caribbean island was admitted with myalgia, tiredness, and rigors. On initial assessment, he was found to have yellow sclerae and high temperature. Urgent blood panel showed stage 3 acute kidney injury, deranged liver function tests, and thrombocytopenia. Based on the coexistence of both organs' dysfunction, a clinical diagnosis of hepatorenal syndrome was made by the admitting team. He received specialist review with alternative diagnoses considered and was transferred to the regional renal centre receiving two sessions of haemodialysis. His illness was further complicated by pulmonary haemorrhage which added further complexity to the working diagnosis. Initially requested serology tests did confirm suspected leptospira infection and the patient was treated with appropriate antibiotics. Later in the course of illness, when independent of dialysis with improving renal function after hospital discharge, he presented with marked shortness of breath and was found to have a large hemorrhagic pericardial effusion which was drained successfully with rapid improvement of breathlessness. He continued to show clinical and functional improvement on subsequent clinic visits. His renal function normalised and he returned to his normal job. This case highlights the rarely encountered but potentially life threatening complications of Leptospirosis – particularly the late presentation with hemorrhagic pericarditis. It also serves as a reminder of the importance of ensuring hepatorenal syndrome remains a diagnosis of exclusion and that detailed travel history can provide the correct diagnosis before serological confirmation.