A 28-year-old woman developed viscerotropic disease after receiving 17DD-yellow-fever-vaccine. The woman was admitted to the ICU of a tertiary hospital due to acute liver failure. Ten days prior to admission, she presented to the emergency department of a secondary hospital due to recent onset of dizziness and headache. She was prescribed symptomatic treatment (unspecified) and discharged. After 3 days, she returned to the same secondary hospital with choluria and jaundice. She denied bleeding, fever and use of illicit drugs or other medications, except oral contraceptives. Twelve days prior to the onset of the symptoms, she was vaccinated against yellow fever with 17DD-yellow-fever-vaccine [17DD; full dose; dosage and route not stated]. In previous 9 years, she had not received any other live-attenuated vaccine. Vaccination history was positive for mumps virus vaccine live [mumps vaccine], measles vaccines and rubella vaccines in 2008. At admission to the secondary hospital, she had mild jaundice, and cardiopulmonary and abdominal examination was unremarkable. She was admitted for further investigations. Due to declined in the clinical condition with elevated bilirubin and aminotransferase levels, hypomagnesaemia and INR, she was referred to the tertiary hospital. At initial evaluation, she was alert and oriented to place and time, hypoxemic and jaundiced. Haematological and biochemical tests revealed normal leukocyte count, thrombocytopenia, hyperbilirubinemia and increased lactate and aminotransferase levels. In the initial blood samples, yellow fever IgM were detected. Reverse transcription PCR using primer pairs specific for vaccine and wild yellow viruses were negative, probably due to the time elapsed since the onset of the symptoms and testing. Based on serological tests other infectious diseases were ruled out. Abdominal ultrasound showed a liver with presence of free fluid in the abdominal cavity, irregular shape, no biliary tract dilatation and normal portal venous flow. Chest X-ray and CT scan of the CNS were normal. A presumptive diagnosis of fulminant hepatic failure was made, and she was included in the liver transplantation list. Blood cultures were obtained, and she started receiving unspecified broad-spectrum antibiotics. However, her clinical condition continued to worsen, especially liver function. Seven days after the admission, she was found to be confused and drowsy. Hence, endotracheal intubation was performed. The second CT scan of the CNS showed moderate brain swelling without bleeding. Measures were taken to control intracranial, while she waited for liver transplant. After 2 days (31 days after the vaccination), pupillary light reflex was absent, and she had cardiorespiratory arrest and died. Autopsy revealed systemic involvement. Liver demonstrated areas of irregular parenchymal retraction and extensive necrosis. Histopathology revealed coalescing hepatic necrosis, extensive panlobular and portal lymphomononuclear infiltrate with several Councilman bodies and significant ductal proliferation. Immunohistochemistry using a commercial anti-yellow fever polyclonal antibody showed positivity in the portal tract in the liver and Kupffer cells. Brain had extensive oedema. Lungs demonstrated widespread, bilateral haemorrhages in the pulmonary parenchyma. Histology revealed intense intra-alveolar haemorrhage with interstitial pneumonia and diffuse alveolar damage. She was diagnosed with viscerotropic disease related to 17DD-yellow-fever-vaccine.