



TTS 2024 **ISTANBUL TURKEY**
September 22-25
30th International Congress of The Transplantation Society

Organized in partnership with



Endorsed by

Cortical Ribbon Sign in A Liver Transplant Recipient with Hepatic Encephalopathy

www.tts2024.org

Deniz Sivriođlu¹, Seda Kibarođlu², Fatma İrem Yeşiler¹, Helin Şahintürk¹, Pınar Zeynelođlu¹, Mehmet Haberal³

¹Department of Anesthesiology and Critical Care Unit

²Department of Neurology

³Department of General Surgery, Division of Transplantation

Başkent University Faculty of Medicine, Ankara, Turkey



Cortical Ribbon Sign in a Liver Transplant Recipient with Hepatic Encephalopathy

Introduction

The clinical presentations and magnetic resonance imaging (MRI) findings of hepatic encephalopathy (HE) may mimic those observed in Creutzfeldt-Jakob disease (CJD).

This case report describes a liver transplant recipient who demonstrated the cortical ribbon sign on MRI post-transplantation, a sign traditionally associated with CJD, but herein attributed to HE.

*Muir RT, Sundaram ANE. *Can J Neurol Sci.* 2019; 46: 758–759

Case Report

54-year-old ♀

DM,
cryptogenic
cirrhosis

portal vein
thrombosis

hepatorenal
syndrome

recurrent HE
episodes

TIPS

- She was admitted to intensive care unit (ICU) after a living donor liver transplantation (LDLT) at early postoperative period.

Organized in Partnership with

Endorsed by

MELD : 19, Child Pugg score: 11C

Cortical Ribbon Sign in a Liver Transplant Recipient with Hepatic Encephalopathy

Case Report

At her ICU admission

- Need for mechanical ventilation
- Cardiovascular support with vasopressors and inotropes

APACHE II: 8 (expected mortality 8.7%)

GCS: 3 (under sedation)

Small for size syndrome / delayed graft response

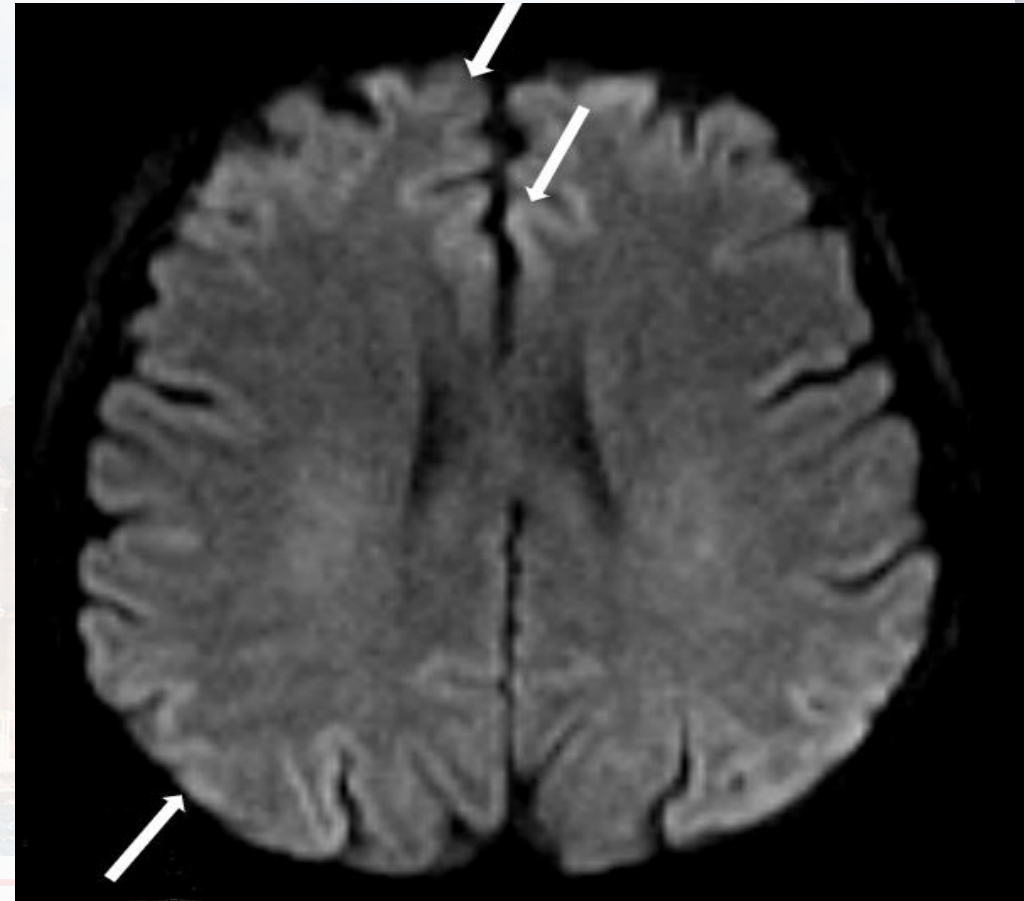
- 24 sessions of therapeutic plasma exchange

Stage 3 acute kidney injury

- Continuous renal replacement therapy (CRRT)

On the 8th day of invasive mechanical ventilation

48 hours sedation \emptyset \Rightarrow GCS:8 \Rightarrow cooperation-orientation \emptyset




a ribbon-like signal hyperintensity of cerebral cortical gyri of the right predominant bilateral frontal, parietal, and occipital lobes³

Cortical Ribbon Sign in a Liver Transplant Recipient with Hepatic Encephalopathy


Case Report

Lumbar puncture \emptyset  thrombocytopenia

EEG \emptyset  hemodynamic instability

CJD \emptyset  no history of prion exposure and

on 10th day of ICU:

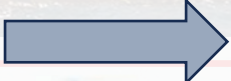
 GCS: 13-14 (E₃, M₆, V₄₋₅) without CJD treatment



Hepatic encephalopathy



On the 14th day of ICU admission

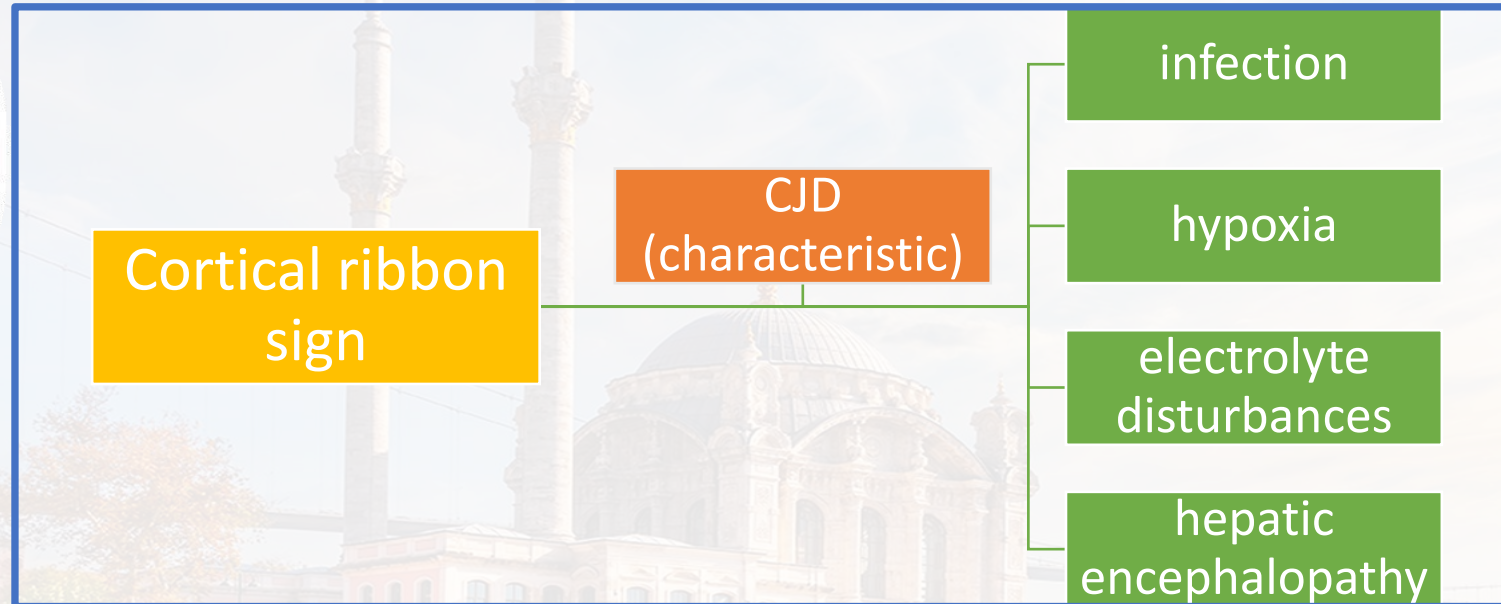
Exitus  sepsis related to multidrug-resistant bacterial infection and respiratory syncytial virus.

Organized in Partnership with

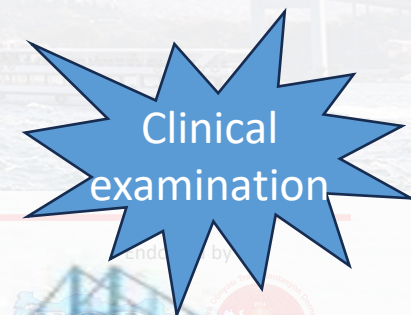
Endorsed by

Cortical Ribbon Sign in a Liver Transplant Recipient with Hepatic Encephalopathy

Conclusion



In a liver transplant recipient with HE who do not undergo further examination
the patient's medical history + clinical examination
may help for the differential diagnosis of cortical ribbon sign on MRI



*Abdulmassih R, Min Z. Intern Emerg Med. 2016;11(2):281-3

**Chitravas N, Jung RS, Kofskey DM, et al. Ann Neurol. 2011;70:437-44