

AUTOIMMUNE ENCEPHALITIS

*When to suspect
and treat in the ICU*

Dr Amy May Lin Quek

Senior Consultant, National University Hospital, Singapore

Assistant Professor, Yong Loo Lin School of Medicine,

National University of Singapore

Disclosure Slide

- Dr Amy Quek has received honoraria, educational grants and travel support from Roche, Astra Zeneca, Eisai and Merck for advisory, consulting services and speakers' fees.

Learning Objectives

By the end of the session, participants will be able to

1. Identify clinical features and ICU presentations of autoimmune encephalitis
2. Outline a practical diagnostic framework to recognize autoimmune encephalitis in critically ill patients
3. Describe immunotherapy strategies and ICU management principles for autoimmune encephalitis

Key Message

Autoimmune encephalitis in the ICU is life threatening but treatable. Early recognition, timely immunotherapy and meticulous supportive care can improve patient outcomes.

References

- Sonnevile R, Venkatesan A, Honnorat J. Understanding auto-immune encephalitis in the ICU. *Intensive Care Med.* 2019 Dec;45(12):1795-1798. doi: 10.1007/s00134-019-05773-0. Epub 2019 Sep 25. PMID: 31555853.
- Schubert J, Brämer D, Huttner HB, Gerner ST, Fuhrer H, Melzer N, Dik A, Prüss H, Ly LT, Fuchs K, Leypoldt F, Nissen G, Schirotzek I, Dohmen C, Bösel J, Lewerenz J, Thaler F, Kraft A, Juranek A, Ringelstein M, Sühs KW, Urbanek C, Scherag A, Geis C, Witte OW, Günther A; GENERATE and IGNITE network. Management and prognostic markers in patients with autoimmune encephalitis requiring ICU treatment. *Neurol Neuroimmunol Neuroinflamm.* 2018 Oct 30;6(1):e514.
- Schwarz L, Akbari N, Prüss H, Meisel A, Scheibe F. Clinical characteristics, treatments, outcome, and prognostic factors of severe autoimmune encephalitis in the intensive care unit: Standard treatment and the value of additional plasma cell-depleting escalation therapies for treatment-refractory patients. *Eur J Neurol.* 2023 Feb;30(2):474-489.
- Uy CE, Binks S, Irani SR. Autoimmune encephalitis: clinical spectrum and management. *Pract Neurol.* 2021 Oct;21(5):412-423. doi: 10.1136/practneurol-2020-002567. Epub 2021 Jun 9. PMID: 34108243; PMCID: PMC8461404.
- Li Z, He X, Li D, Yuan R, Zhai Y, Teng J, Deng W. Clinical features and factors associated with outcomes of antibody-negative autoimmune encephalitis in patients requiring intensive care. *Crit Care.* 2025 Jan 15;29(1):24. doi: 10.1186/s13054-024-05233-2.
- Legouy C, Cervantes A, Sonnevile R, Thakur KT. Autoimmune and inflammatory neurological disorders in the intensive care unit. *Curr Opin Crit Care.* 2024 Apr 1;30(2):142-150.
- Mittal MK, Rabinstein AA, Hocker SE, Pittock SJ, Wijdicks EF, McKeon A. Autoimmune Encephalitis in the ICU: Analysis of Phenotypes, Serologic Findings, and Outcomes. *Neurocrit Care.* 2016 Apr;24(2):240-50.