

Clinical Protocol

WERNICKE'S ENCEPHALOPATHY AND PABRINEX®

SETTING	Trust-wide
FOR STAFF	Nurses, doctors, pharmacists
PATIENTS	Adult inpatients suspected or at risk of Wernicke's Encephalopathy (WE) due to high alcohol intake

Vitamin B1 Deficiency

Wernicke's Encephalopathy (WE) is a significantly disabling and potentially lethal condition induced by thiamine (vitamin B1) deficiency, commonly associated with Alcohol Use Disorder. WE can be prevented or reversed if identified and treated early.

Left untreated, WE can develop into Korsakoff's Syndrome. Patients with Korsakoff's Syndrome often have permanent neurological disability and require long-term care. Only about 20% eventually recover completely during long-term follow-up care.

Protocol

On admission, assess risk of malnutrition and symptoms of thiamine deficiency (confusion, ataxia and nystagmus). This classic triad of symptoms only occurs in 10% of patients with WE confirmed so **treat if high index of suspicion even in the absence of classic symptoms** i.e. decreased level of consciousness, unsteady gait, memory disturbance, unexplained hypotension/hypothermia.

Prescribe prophylactically if Wernicke's not suspected but patient is at risk (harmful/dependent drinker at risk of malnourishment and/or decompensated liver disease).

Check serum potassium, magnesium and phosphate levels and supplement where necessary. Hypomagnesaemia should be treated promptly as deficiency may result in impaired utilisation of parenteral thiamine.

IV Pabrinex is first line. Give I/M Pabrinex (available from pharmacy) if your patient does not have IV access and is high risk of WE. Contact ward pharmacist within working hours/on call pharmacist via switchboard out of hours. Please note this preparation is different to IV Pabrinex and should be prescribed at a dose of one pair I/M BD and changed once IV access is available.

Note due to rare reports of serious allergic reactions, treatment for anaphylaxis, including resuscitation facilities, should be available when parenteral Pabrinex is given.

WARNING: IV dextrose alone can deplete thiamine stores and precipitate WE in a high risk patient. If in doubt give Pabrinex®. It is advised to give Pabrinex® before dextrose.

All Patients Managed on Symptom Triggered Withdrawal (CIWA) should be prescribed Treatment dose of Pabrinex® (2 pairs IV TDS).

REFERENCES

[Day, E. et al, 2013. Thiamine for the prevention and treatment of Wernicke-Korsakoff Syndrome in people who abuse alcohol. *Cochrane Database of Systematic Reviews* \[Online\]. Available at: <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004033.pub3/full>](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004033.pub3/full)

Electronic Medicines Compendium (2020) *Pabrinex Intravenous High Potency, Concentrate for Solution for Infusion*. [Pabrinex Intravenous High Potency, Concentrate for Solution for Infusion - Summary of Product Characteristics \(SmPC\) - \(emc\) \(medicines.org.uk\)](https://www.medicines.org.uk)

Electronic Medicines Compendium (last updated July 2018) *Pabrinex Intramuscular High Potency Injection*. Summary of Product Characteristics (SmPC) - (emc) ([medicines.org.uk](https://www.medicines.org.uk)).
<https://www.medicines.org.uk/emc/product/1426/smpc>

Medicines and Healthcare products Regulatory Agency (MHRA), 2014. Pabrinex: allergic reactions. <https://www.gov.uk/drug-safety-update/pabrinex-allergic-reactions>

NICE clinical guideline number 115: Alcohol-use disorders: diagnosis, assessment and management of harmful drinking (high-risk drinking) and alcohol dependence. 2011. <https://www.nice.org.uk/guidance/cg115> .

NICE clinical guideline number 100: Alcohol-use disorders: physical complications: Updated April 2017: <http://guidance.nice.org.uk/CG100>

With thanks to Matt Pitman, Senior Pharmacist- Hepatology

AUTHORISING BODY

Hepatology Governance Group

RELATED DOCUMENTS AND PAGES

<http://connect/DIVISIONS/MEDICINE/ALCOHOLSPECIALISTTEAM/Pages/default.aspx>

Medically supervised inpatient chlordiazepoxide prescribing guidance for adults with acute alcohol withdrawal
<http://www.avon.nhs.uk/dms/download.aspx?did=15284>

QUERIES AND CONTACT

Alcohol specialist nurses: 27255, bleep 3444 or 6110
Pharmacy: Medicines information: 29283

Appendix 1 – Flowchart for prescribing Pabrinex®

