

Vitamin Prophylaxis for use in Adult Medicine Directorate

Wernicke's Encephalopathy

WE is a reversible biochemical lesion of the CNS caused by overwhelming metabolic demands being made upon depleted B vitamin (in particular thiamine) reserves. WE is most common in chronic alcohol misusers

Korsakoff's Psychosis

Korsakoff's psychosis results from the biochemical lesion progressing to irreversible structural changes and the development of a chronic amnesic syndrome, characterised by loss of short-term memory and impaired ability to acquire new information

Wernicke's Encephalopathy

- Occurs in 12.5% of chronic alcohol misusers
- Only 5-18% are diagnosed in life
- Fatal in up to 20% of inappropriately managed patients
- Results in long term damage in 85% of survivors
- 25% of patients need long term institutionalisation, potentially resulting in litigation

Only 10% of patients will have the full triad of signs (confusion/ataxia/ophthalmoplegia) so treatment is therefore empirical and needs a high index of suspicion

Who to treat – incipient WE

All patients with any evidence of chronic alcohol misuse with any of the following

Acute confusion

Decreased conscious level

Memory disturbance

Ataxia

Ophthalmoplegia

Hypothermia with hypotension

Hypoglycaemic patients

All hypoglycaemic patients (who are treated with IV glucose) with evidence of chronic alcohol ingestion **must** be given IV Pabrinex immediately because of the risk of acutely precipitating WE

You will come across many patients in the ED who are **at risk** of WE, especially those with DTs, alcoholic seizures or alcoholic head injuries. Always consider the need for treatment in these patients.

Always consider the need for intravenous thiamine in patients admitted to the Emergency Department head injury observation ward.

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1. Incipient Wernicke's encephalopathy

Does the patient have any of the following signs/symptoms?

- Confusion/agitation
- Ataxia
- Ophthalmoplegia
- Nystagmus
- Decreased consciousness
- Hypothermia/hypotension

Immediate treatment with:

2 pairs of vitamins B+C (Pabrinex IV) TID by IV infusion for 3 days

Followed by 1 pair of vitamins B+C once daily by infusion for 3-5 days or until clinical improvement ceases.

Then treat as in 3

NB IV infusion of Pabrinex should be given over 30 minutes in 100mls of 0.9% sodium chloride. The patient should be observed for anaphylactic reactions throughout the infusion. The IM route should only be considered if the patient's coagulation is normal and venous administration is not possible.

2. The at risk group

Patients with

- significant weight loss/poor diet
- signs of malnutrition
- diarrhea
- vomiting

If patient has 2 or more of the above:

1 pair of vitamins B+C by IV infusion once daily for 3-5 days

Then treat as in 3

3. The low risk group

Thiamine 100mgs tid

Thiamine should be discontinued on completion of the detoxification regime unless there is still evidence of cognitive impairment.