Safe and comfortable Medically-Assisted Alcohol Withdrawal

Nicky Kalk
King's College Hospital Alcohol Care Team
South London and Maudsley NHS Foundation Trust

RCPsych Addictions Webinar Series 2021

Dependence and withdrawal are not equivalent

ICD-10

F10.1 Harmful use of alcohol: alcohol use with evidence of actual physical or psychological harm

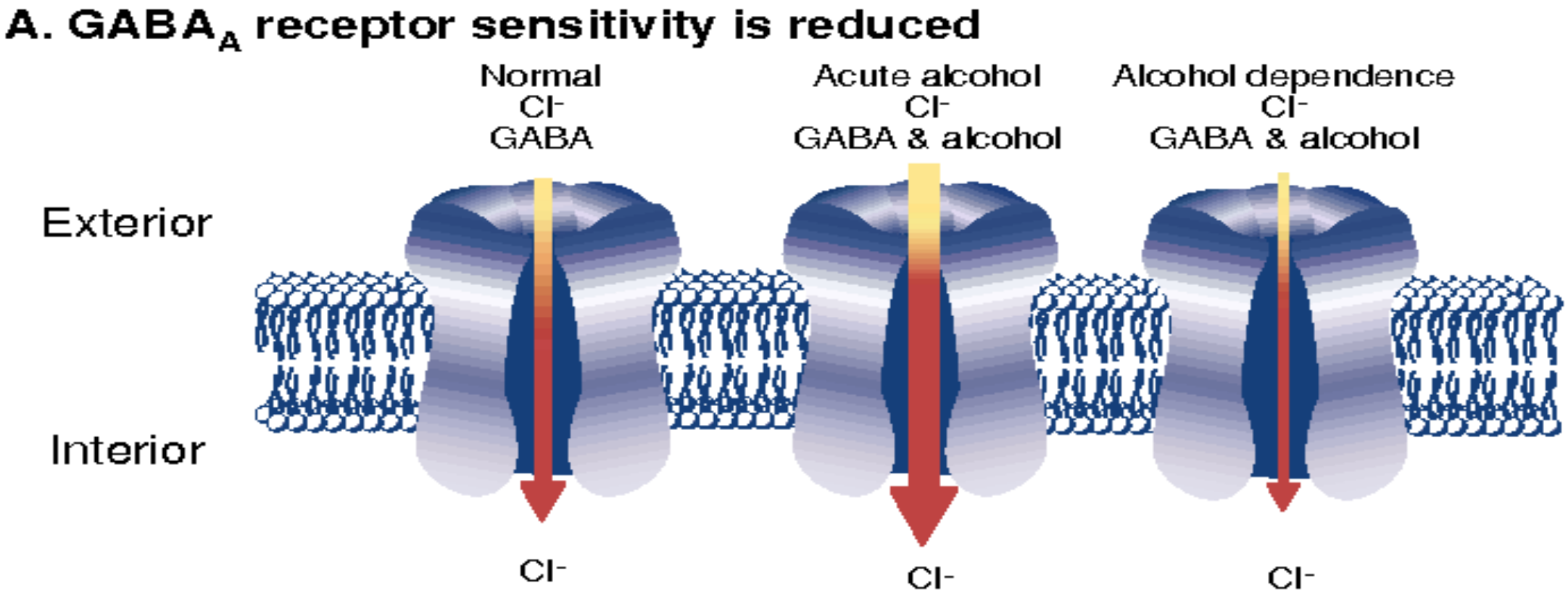
F10.2 Alcohol dependence: 3 of criteria occurring together in the past year:

- Preoccupation
- Loss of control
- Tolerance
- Withdrawal (not an early sign!)
- Neglect of other activities
- Ongoing use despite evidence of harm

Mechanism of alcohol withdrawal:

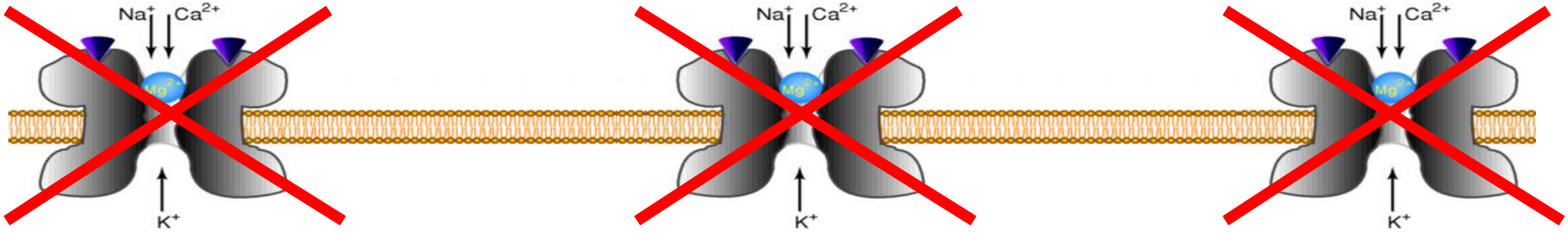
Acute alcohol facilitates GABA-A transmission

Chronic alcohol leads to changes in GABA-A receptor expression and function

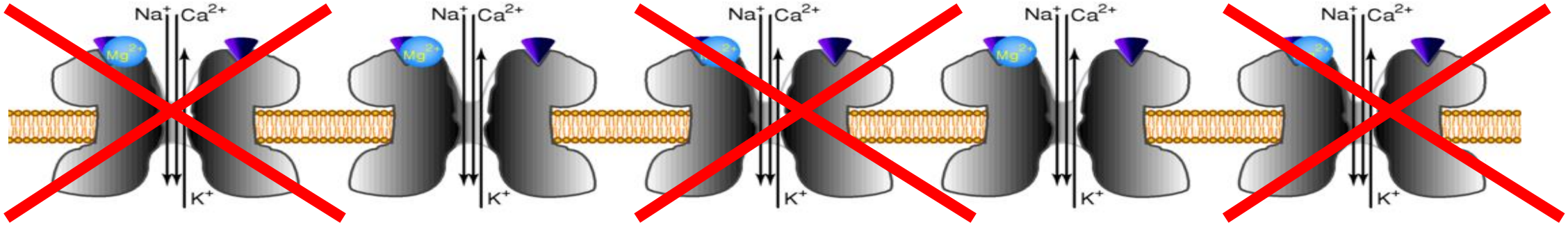


Mechanism of alcohol withdrawal II:
Alcohol also affects glutamate

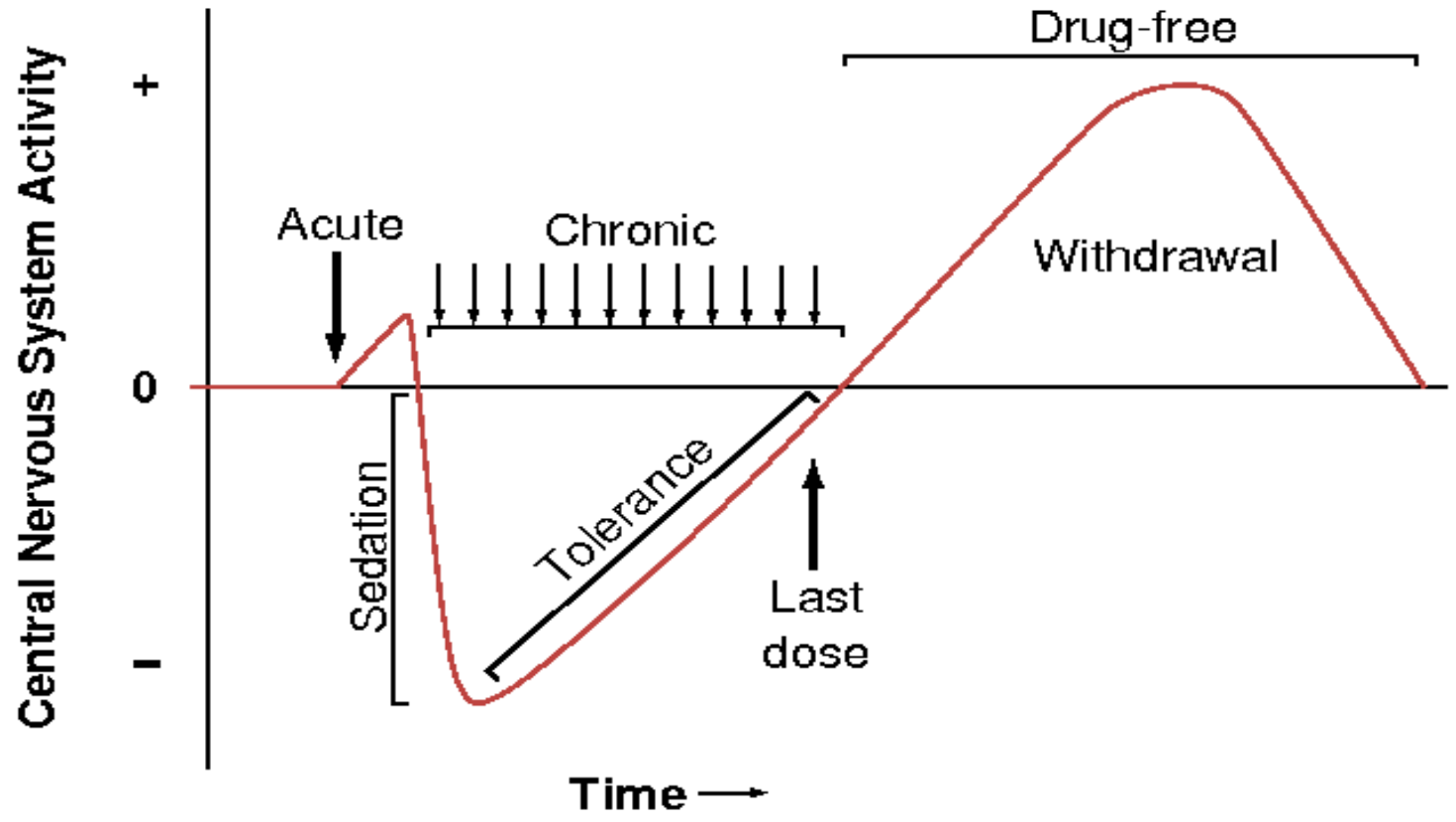
Acutely, alcohol inhibits this system : NMDA



Chronic alcohol leads to receptor up-regulation
- associated with impaired memory



With removal of alcohol, excess glutamate transmission and insufficient GABA-A transmission occur



Not just glutamate

GABA inhibits other systems

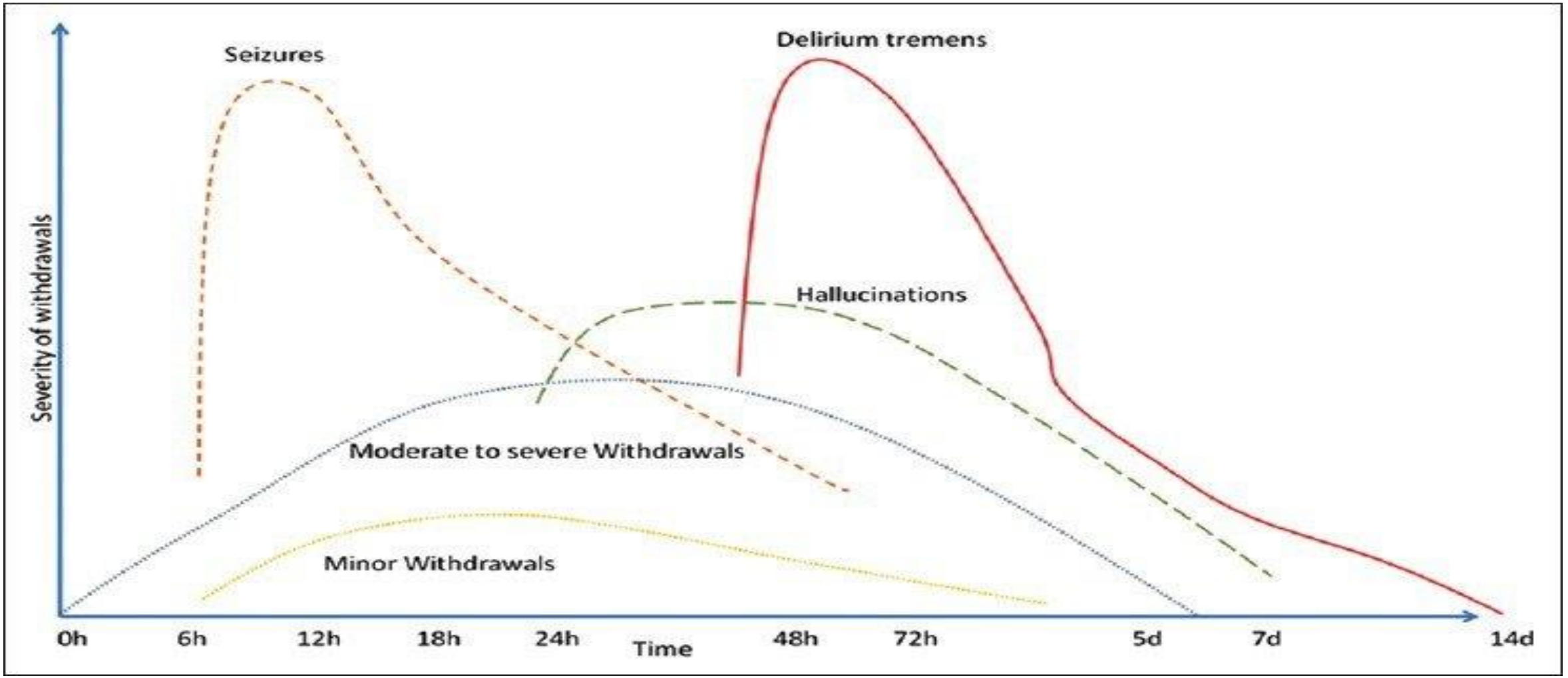
Noradrenaline (autonomic features)

Dopamine (hallucinations)

A good assessment is important

- **AUDIT** score (>20 = at risk)
- Quantity (what is the size of the bottle?)
- Frequency
- **Withdrawal symptoms**
- **When they had their last drink**
- **Severity of Alcohol Dependence Questionnaire (SADQ)** – quantifies withdrawal severity
- Collateral can be helpful – look in the notes at minimum

Complications of alcohol withdrawal occur at different times during detoxification



Who is at risk of severe withdrawal?

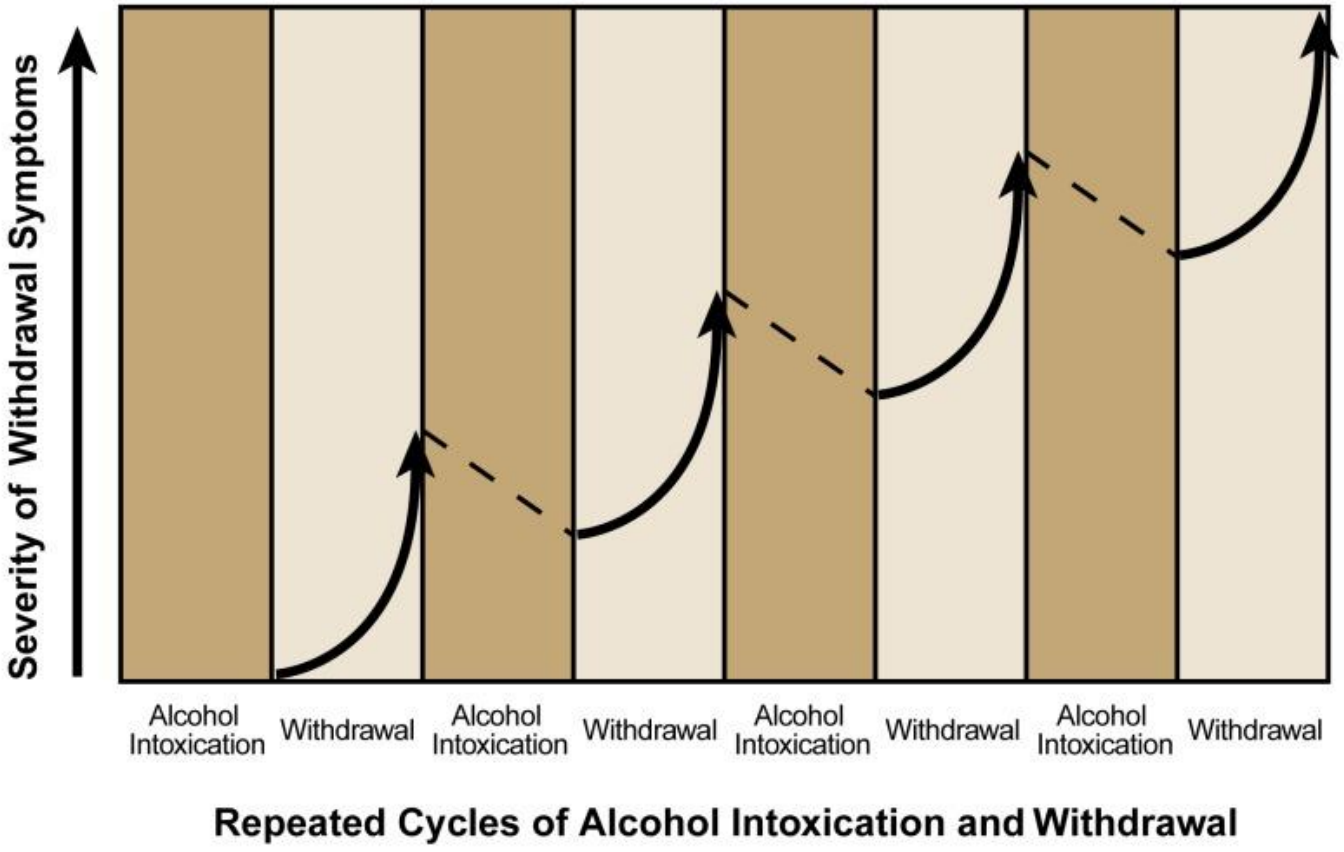
History of/presents with seizures

History of/presents with delirium

SADQ > 30

Did these complications happen with or without treatment?

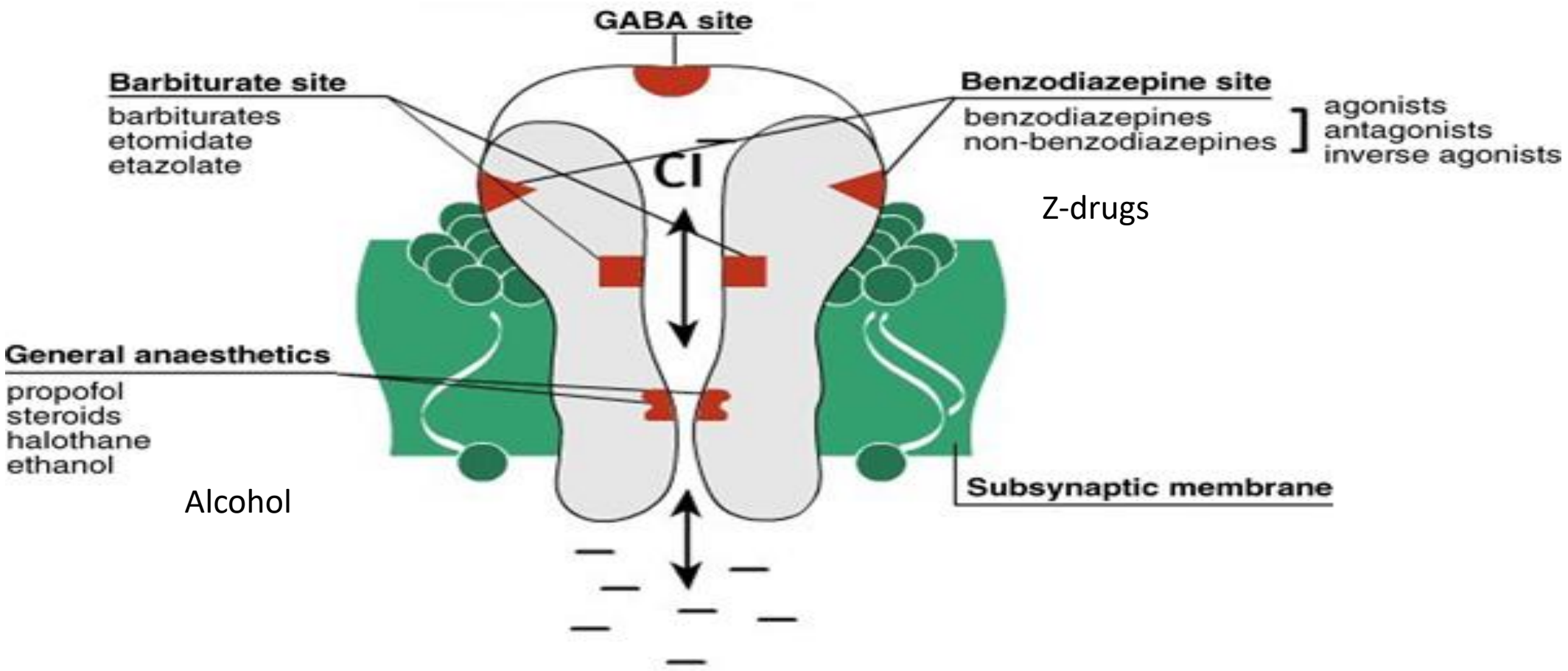
Multiple episodes of MAW can also influence risk of complications



- Similar kindling phenomenon to epilepsy
- Increased severity with multiple episodes
- Especially in those people who ‘binge’ very heavily for short periods of time (7-10 days)
- Once a complication has occurred, likely to occur again

The mainstay of treatment for alcohol withdrawal: benzodiazepines

Diazepam is the driest martini….



Z-drugs

Alcohol

How to prescribe a medically-assisted withdrawal in uncomplicated withdrawal

Check with the nursing staff
Do they have a withdrawal scale?
Do they know how to use it?
Do they know how often to monitor the patient?

<u>Symptom triggered:</u>

Use of a validated scale

Most patients – **2-4 hourly scoring**

Long-acting benzodiazepine e.g. chlordiazepoxide 20mg if AWS > 4 or 40mg if >8 max 300mg in 24 hours

If cirrhosis, short-acting benzodiazepine e.g.

Lorazepam 1-2mg 2-4 hourly max 12mg in 24 hours

<u>Fixed dose:</u>

If you are worried about severe or complicated withdrawal, worth considering regular chlordiazepoxide + prn

What to watch out for in people prescribed benzodiazepines?

- Unsteadiness
- Sedation
- Respiratory depression
- (Neutropaenia)

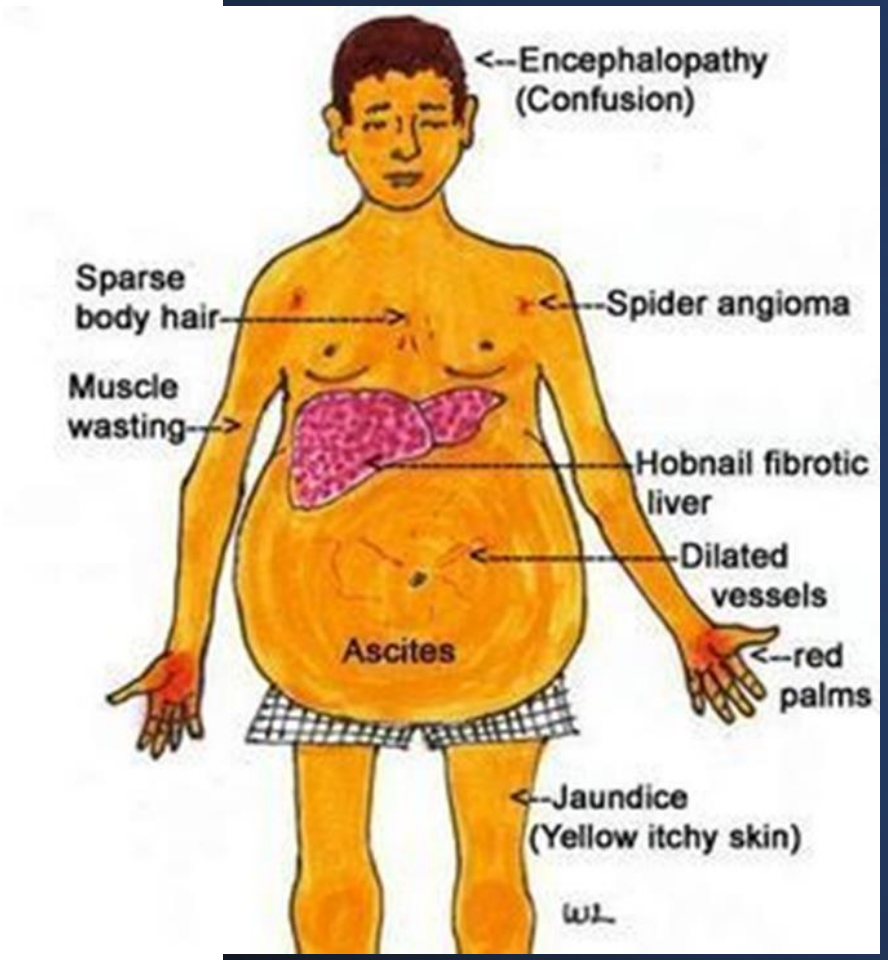
Who needs a short-acting benzodiazepine?

Diagnosis and stigmata of cirrhosis

Limited capacity to synthesise or metabolise – bilirubin, albumin, INR

Portal hypertension – low platelets

Early signs of Hepatic Encephalopathy – delayed responses, slurring



Delirium Tremens

Should be a never event in the admitted patient

Estimated 3-5% of patients with alcohol dependence in hospital

Diagnosis of DTs:

- History of alcohol dependence
- Antecedent presentation consistent with withdrawal
- Agitated delirium
- Mild form – perceptual disturbances – to frank hallucinations and delusions

Implications:

10-25% mortality untreated

Pharmacological management is different from delirium per se

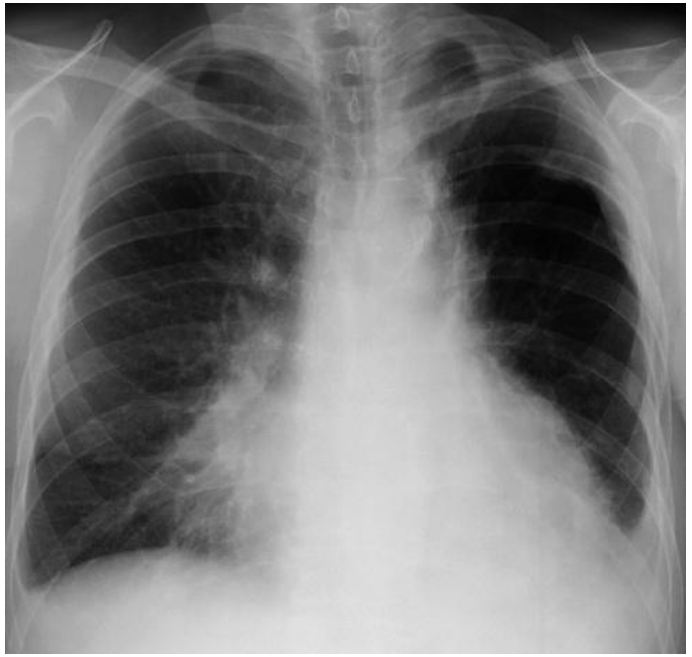
Management of Delirium Tremens

Management:

- In psychiatric in-patient setting – get to A&E!
- In the general hospital, get the cavalry – appropriate management will involve ACT, medical team, psychiatric team, nursing staff and iMobile at least need to know about them
- Side-room, 1:1, involvement of family if possible
- Converging opinion – ASAM, NSW, NICE – emphasising use of high dose benzodiazepines
- Use antipsychotics with caution and only after significant benzo dosing

Don’t stop thinking – DTs is usually complex

Sepsis makes withdrawal worse

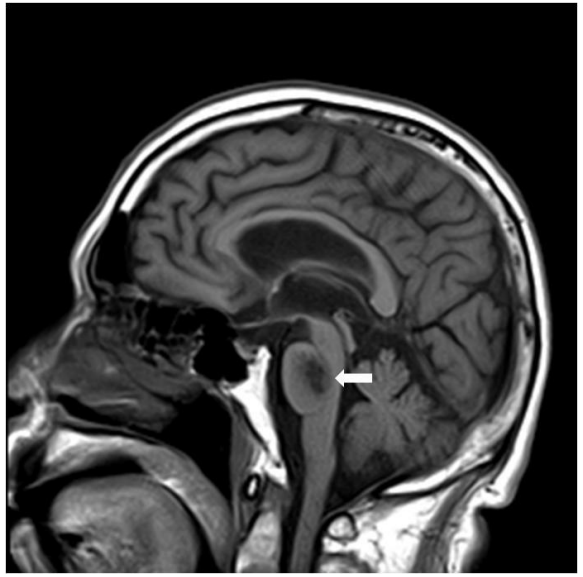


Source: Schiefer, Wilhelm, Hart (Eds.). Clinical Neuro-Ophthalmology - A Practical Guide. Springer, Berlin/Heidelberg/New York, 2007.

Wernicke Korsakoff Syndrome

Remember **undiagnosed cirrhosis** – Hepatic encephalopathy

Remember undiagnosed **COPD** – hypercapnic tremor



CPM is more common than I had thought and looks like Pabrinex refractory WKS

Correct Na v cautiously

Prevention of Wernicke's Encephalopathy
Who is at risk?

In the general hospital, could argue everyone

2 screening questions:

Do you regularly miss meals?

Yes at risk

Do you get pins and needles in your hands and feet?

If yes then at risk

And/or

Anyone with cirrhosis

Who has Wernicke's Encephalopathy?

Caine Criteria

Any two of

- History of malnutrition
- Pins and needles in hands and feet
- Any eye movement abnormality (nystagmus in any direction, paralysis of lateral gaze)
- Ataxia
- Confusion

Treatment is with parenteral thiamine (IM or IV)

For those at risk of WKE:

3 pairs of ampoules

For those showing any signs of WKE:

2 pairs, three times a day, for at least 5 days

Magnesium needs to be checked and replaced if low

Finally, start thinking after-care

EXPLORE WITH THE PATIENT WHAT HAS HELPED BEFORE AND CURRENT MOTIVATION TO QUIT/CHANGE

AA IN-REACH/ONLINE

ONLINE SMART RECOVERY

MAKE LINKS WITH THE PATIENT'S COMMUNITY ALCOHOL SERVICE

THINK RELAPSE PREVENTION MEDICATION

Resources

- https://www.nice.org.uk/guidance/cg100
- https://www.asam.org/Quality-Science/quality/guideline-on-alcohol-withdrawal-management
- https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2008_011.pdf
- Schuckit, M (2014) Recognition and management of alcohol withdrawal delirium. NEJM 371:22.
- Maudsley Guidelines 14th Edition (DOI)